

FISHER & PAYKEL

WALL OVEN

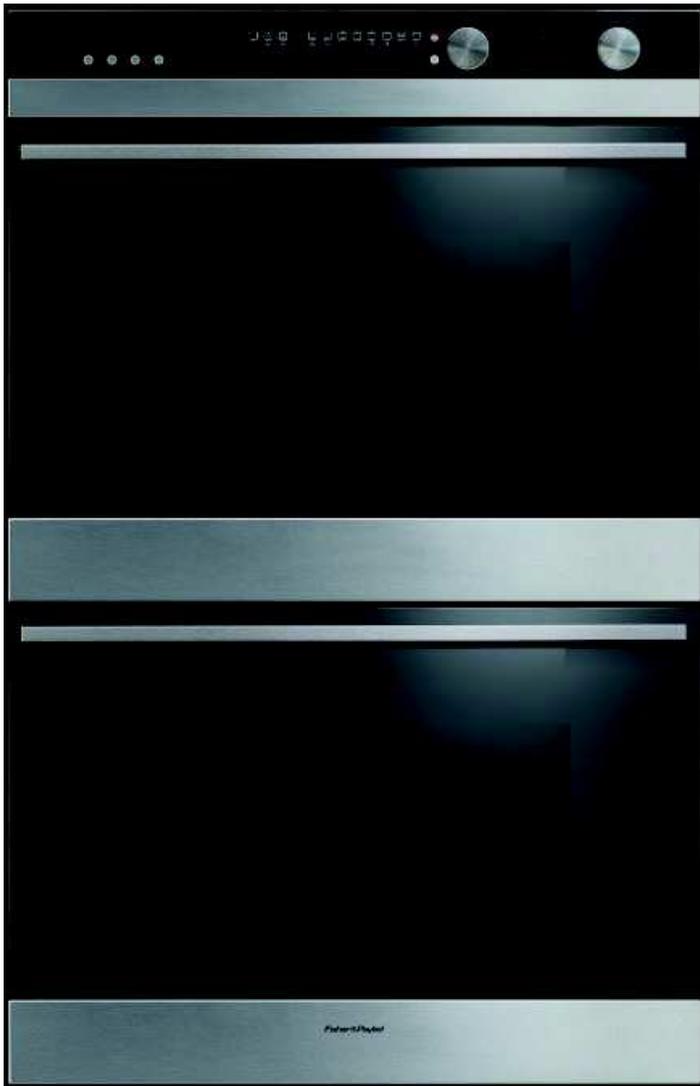
**OB76DD and OB76SD
V3 models**

SERVICE MANUAL

NZ AU

FEATURED PRODUCT & CONTACT ADDRESSES

Model	Description	CA	CA New logo	Market
OB76SDEPX3	Single oven, designer, pyrolytic self clean, stainless steel.	80887 80971	81488 81824	AA
OB76DDEPX3	Single oven, designer, pyrolytic self clean, stainless steel	80888 80972	81489 81825	AA



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1 HEALTH & SAFETY

IMPORTANT !

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

Note: When servicing the walloven, Health and Safety issues must be considered at all times. Specific safety issues are listed below with their appropriate icon. These are illustrated throughout the service information to remind service people of the Health and Safety issues.

1.1.1 Electrical Safety



Ensure the mains power has been disconnected before servicing the walloven. If the mains supply is required to be on to service the walloven, make sure it is turned off when removing any electrical component or connection to avoid electric shock.

1.1.2 Electrostatic Discharge



An anti-static strap is to be used as electrical static discharge (ESD) protection when servicing electronic components.

1.1.3 Good Working Practices



Ensure the work area is in a tidy and orderly condition at all times so as not to cause a hazard while service work is being completed. Always clean and tidy the walloven and work area after service is completed.

1.1.3 Insulation Test



Megger test to check insulation.

Warning: Short together the phase and neutral pins on the plug so as not to damage any electronic circuitry.

1.1.4 Sheet Metal Edges



When working around cut sheet metal edges use appropriate gloves or protection to eliminate the chance of receiving a laceration.

1.1.5 Diagnostics



While in diagnostics some safety devices are bypassed. Ensure you do not run components unattended.

1.2 Specialised Tools

For servicing this product, specialised tools are required.

1.2.1 Static Strap

To be used as ESD (electrostatic discharge) protection when replacing or handling electronic components.

2 SPECIFICATIONS

2.1 Oven Weights & Cavity Dimensions

OB76SD weight: 86kg

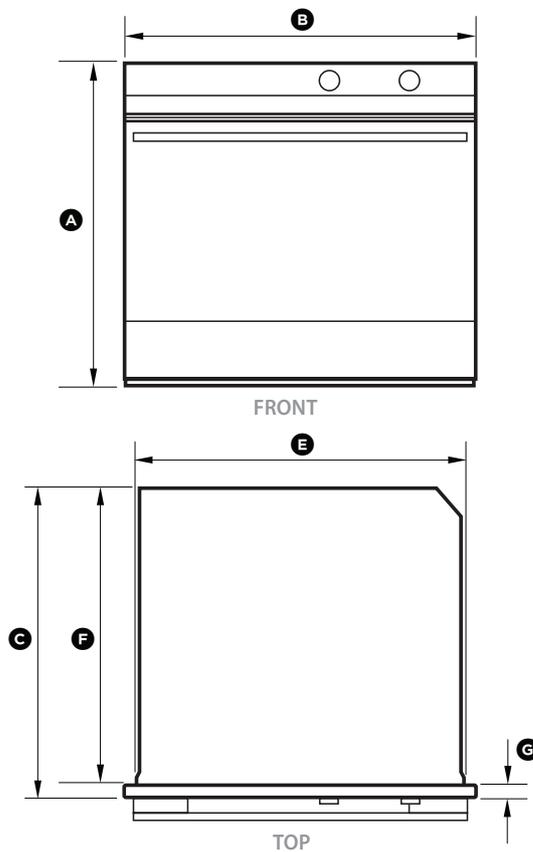
OB76DD weight: 154kg

Internal Cavity dimensions : 402mm H x 604mm W x 400mm D

2.2 Electrical Specifications

MODEL	VOLTAGE	FREQUENCY	MAX POWER
OB76SD	220/240	50Hz	4.7kw
OB76DD	220/240	50Hz	8.5kw

2.3 Product Dimensions

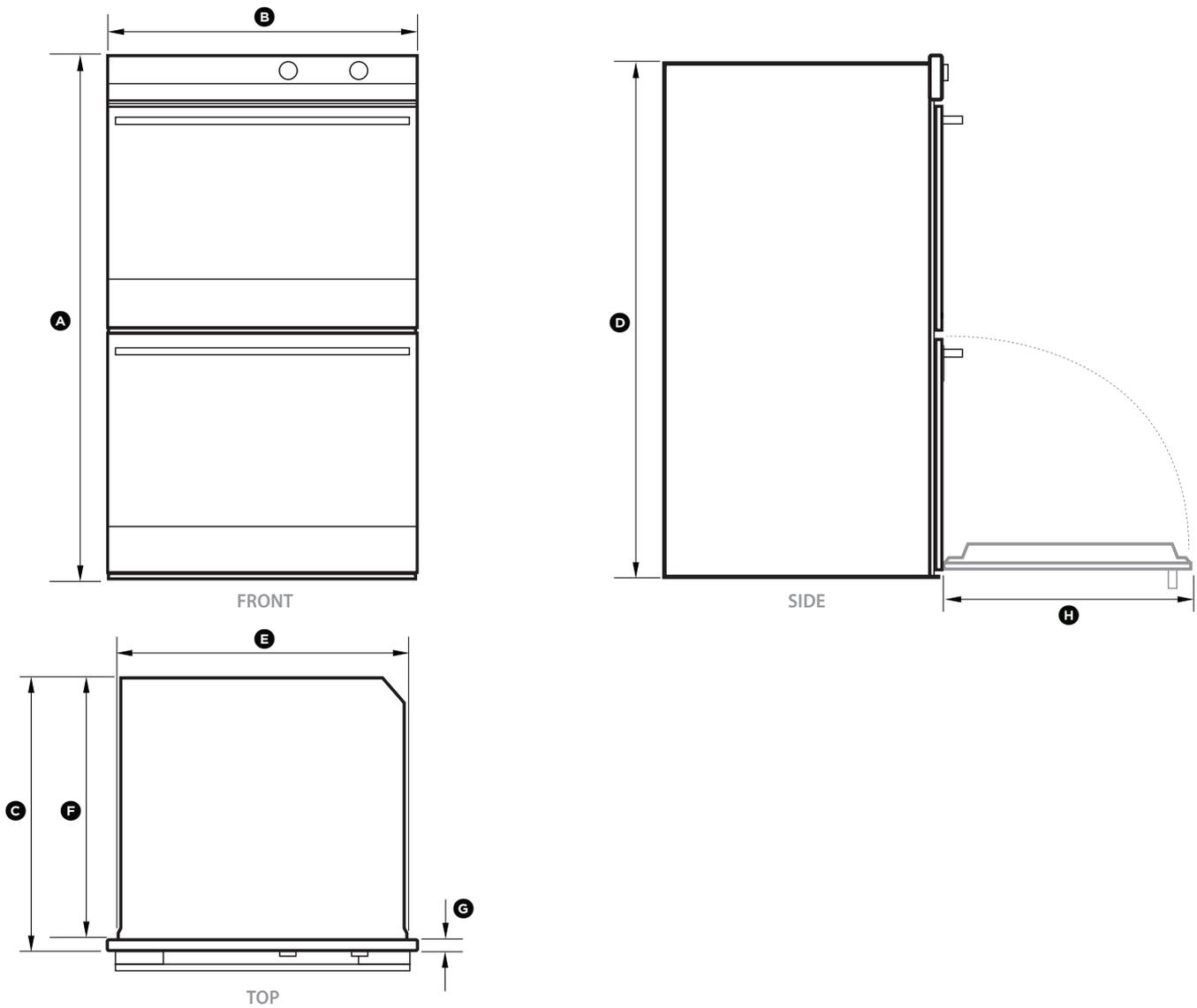


Product dimensions (mm)

OB676SD

A	overall height of product	689
B	overall width of product	760
C	overall depth of product (excluding handle and dials)	608
D	height of chassis	675
E	width of chassis	720
F	depth of chassis	569
G	depth of oven frame and control panel (=distance between front of chassis and front of oven door, excl. knobs)	39
H	depth of oven door when fully open (measured from front of control panel)	530

2 SPECIFICATIONS



Product dimensions (mm)

OB676DD

A	overall height of product	1232
B	overall width of product	760
C	overall depth of product (excluding handle and dials)	608
D	height of chassis	1218
E	width of chassis	720
F	depth of chassis	569
G	depth of oven frame and control panel (=distance between front of chassis and front of oven door, excl. knobs)	39
H	depth of oven door when fully open (measured from front of control panel)	530

3 MODEL / SERIAL NUMBER LOCATION & IDENTIFICATION

3.1 Data Label and Location

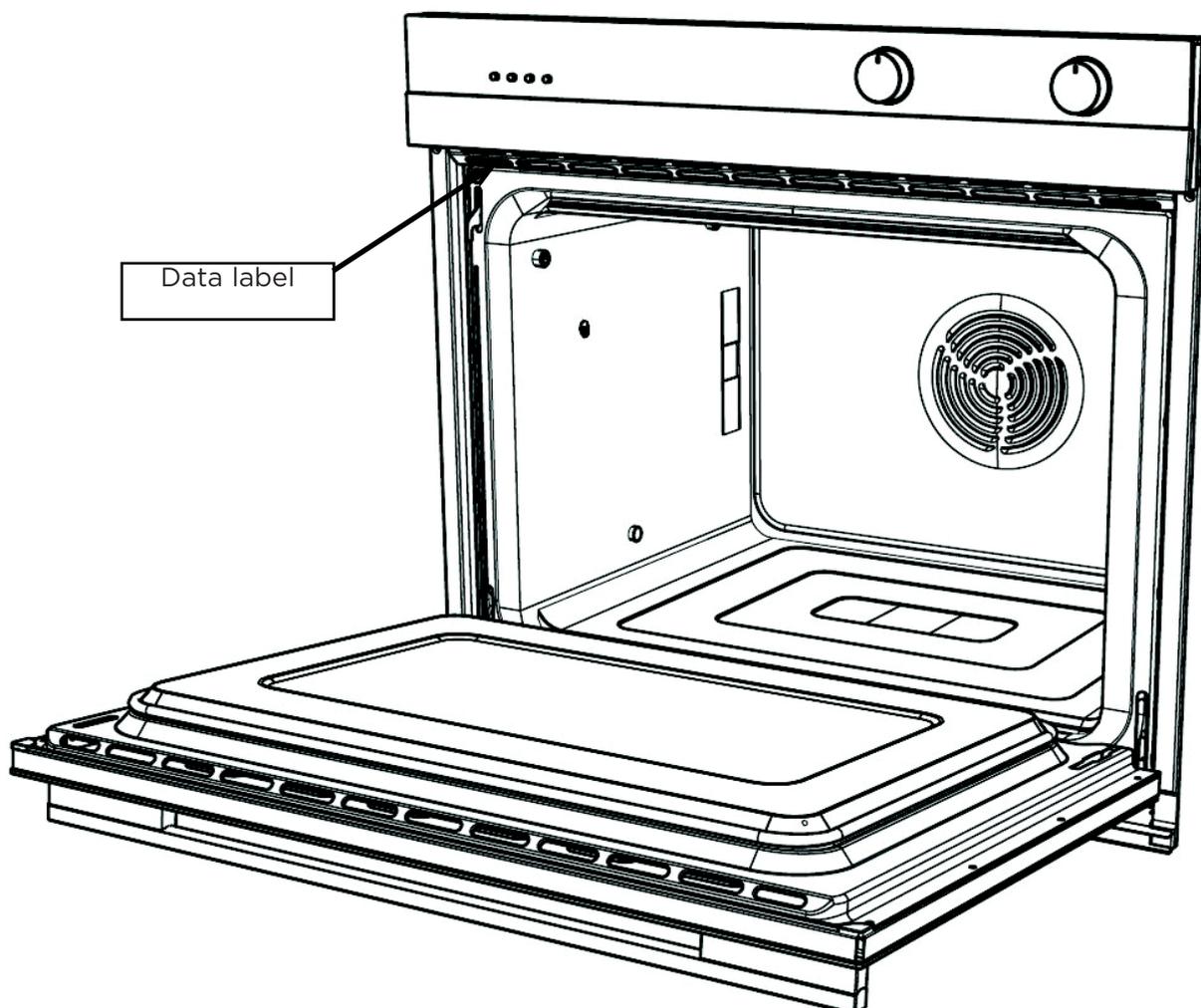
The product data plate is located on the left hand side behind the grill, between the control panel and the oven door (top oven on double models).

The data label contains information specific to that model, like product code number, model number and serial number.

The product code is a dedicated number used to identify the model variants, e.g colour, markets, features.

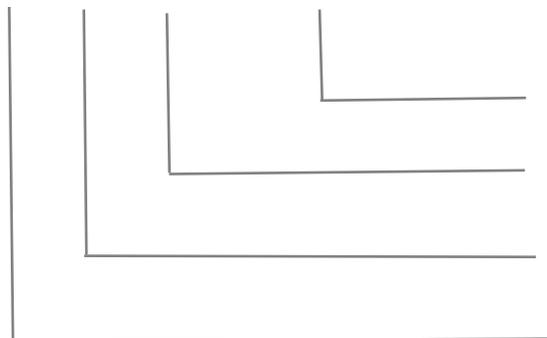
E.g. 80888 - A is a double stainless steel model built for the Australasian market.

The letter shown after the product code signifies the service version of the product. The service version changes when new parts are introduced to the model which are not backwards compatible. When ordering parts, it is very important to use the correct product code and service version. Each product code / service version variation has a dedicated parts manual. For example, 80888-A may comprise different parts to 80888-B.



The serial number consists of three letters and six digits and contains the information shown in the following example:

B H T 123456



Sequential serial number

Manufacturing plant code

FISHERPAYKUL code indicating month of manufacture

CUMBERLAND code indicating year of manufacture

Cumberland code

Letter	C	U	M	B	E	R	L	A	N	D
Year	1	2	3	4	5	6	7	8	9	0

Fisherpaykul code

Letter	F	I	S	H	E	R	P	A	Y	K	U	L
Month	1	2	3	4	5	6	7	8	9	10	11	12

Manufacturing Plant Codes

Between January 1st 2011 and December 2020

Code	Factory	Country
Refrigeration	B	New Zealand
Laundry	S	USA
Manufacturing	T	Thailand
Manufacturing	P	Mexico

In the example above, the appliance was manufactured in the fourth month (April) 2014 in the Thailand factory

The model number on the data label shows the following information relating to that product:

E.g. OB76DDEPX3

Type	OB = Oven Built In
Width	76 = 76cm
Cavity	D = Double cavity S = Single cavity
Family	D = Designer
Features	E = Electronic clock P = pyrolytic
Colour	W = White X = brushed stainless steel
Series	3 = 3rd Iteration

4 TECHNICAL OVERVIEW

4.1 Oven Cavity Fan

The oven cavity fan will turn on eight seconds after the mode is selected. The fan should always operate when the fan element is on.

Operational Modes: Fan Forced
Fan Bake
Fan Grill
Roast (first 20 minutes only)
Warm
Bake (pre-heat assistance only)
Pastry Bake (pre-heat assistance only)

Voltage: 240 VAC
Wattage: 35 watts
Frequency: 60 HZ

4.2 Cooling Fan

The cooling fan will turn on as soon as the oven mode dial is moved from the 'OFF' position. It will turn off after eight seconds if a temperature isn't selected.

The cooling fan will only turn off if the oven cavity has cooled below 150°C after use. If the oven cavity temperature is above 290°C the cooling fan will run at high speed.

During the Self-Clean Cycle the cooling fan in the cavity being cleaned will run at high speed, the other cavity will run on low speed (in a double oven).

Voltage: 220/240 vac
Wattage: 60 watt
Frequency: 50/60 HZ

OVEN MODE	COOLING FAN SPEED	
Bake	Low	Low
Fan Bake	Low	Low
Warm	Low	Low
Fan Forced	Low	Low
Maxi Grill	Hi	Low
Grill	Hi	Low
Fan Grill	Hi	Low
Pastry Bake	Low	Low
Classic Bake	Low	Low
Roast (fan grill first 20 min)	Hi	Low
Roast (bake for remainder)	Low	Low
Self Clean	Hi	Low

*The first speed refers to single ovens or the cavity being used in a double oven.

4.3 Active Vent Fan

The vent fan will operate for the first thirteen minutes of all oven modes except Bake (does not operate) and in Self-Clean Cycle, Grill modes (runs continuously).

Voltage: 220/240 VAC
Wattage: 18 watt
Frequency: 50/60 HZ

4.4 Outer Grill Element

The outer grill element will turn on eight seconds after a mode is selected.

Operational Modes: Bake, Fan Bake, Warm
Maxi Grill
Fan Grill
Roast
Self-Clean

Voltage: 220/240 VAC
Wattage: 1500 watt

4.5 Inner Grill Element

The inner grill element will turn on eight seconds after the mode is selected.

Operational Modes: Grill
Maxi Grill
Fan Grill
Roast (first 20 minutes only)
Self-Clean

Voltage: 220/240 VAC
Wattage: 2900 watt

4.6 Bake Element

The bake element is concealed under the cavity base and will turn on eight seconds after the mode is selected.

Operational Modes: Bake
Fan Bake
Classic Bake
Fan Forced (pre-heat assistance only)
Warm
Roast
Self-Clean

Voltage: 220/240 VAC
Wattage: 1500 watt

4.7 Fan Element

The fan element and oven fan will turn on eight seconds after the mode is selected.

Operational Modes: Fan Forced
Bake (pre-heat assistance only)
Fan Bake
Pastry Bake (pre-heat assistance only)

Voltage: 220/240 VAC
Wattage: 2500 watt

4.8 Temperature Sensor

Voltage: 5 VDC
Max current: 2 mA
Max ambient temp: 540°C
Resistance: 1080 ohms +/- 5 ohms at 21 °C

Degrees °C	Resistance Ω
0	1000
1	1004
2	1008
3	1011
4	1015
5	1019
6	1023
7	1027
8	1030
9	1034
10	1038
11	1042
12	1046
13	1049
14	1053
15	1057
16	1061
17	1065
18	1068
19	1072
20	1076
21	1080
22	1084
23	1087
24	1091
25	1095
26	1099
27	1102
28	1106
29	1110
30	1114



4.9 Halogen Bulbs

The oven cavity lights will come on when the door is opened or when an oven mode is selected. The lights will turn off when the door is closed (if no oven mode is selected) or if the programmed oven cook time has finished.

There are three soft start halogen bulbs in each oven cavity.

Voltage: 12 VAC
Wattage: 20 watt

4.10 Door Lock Motor

The door lock will only operate during the Self-Clean Cycle and is designed to stop the oven door being opened when very high temperatures and potentially dangerous fumes are produced in the oven cavity.

Voltage: 208 - 240v AC
wattage: 40 watt



4.11 Temperature Module

The OB76 models use a display module as a customer interface to show cooking temperature.

This temperature is illuminated and shown on the control panel.

The module uses a harness to communicate with the clock module, and has an encoder for the customer to select temperature.

The module also has LED lights which show red while heating, and turns white when the oven is at the correct temperature.



4.12 Function Module

The OB76 models use a function module as a customer interface, and shows the cooking function selected by illuminating the icon on the control panel.

The module uses a harness to communicate with the clock module, and has an encoder for the customer to select the oven function.

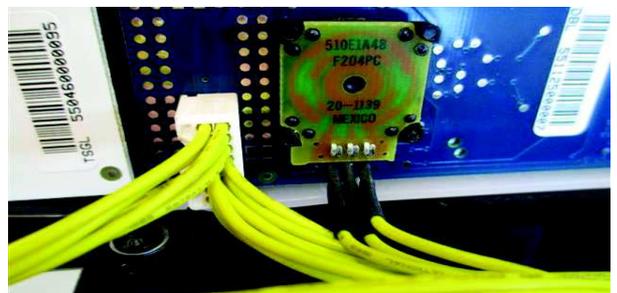
The module also has an illuminated white halo around the control knob.



4.13 User Interface Harness

The temperature and function modules are linked to the clock module via the user interface harness.

This harness uses knob encoders for the customer interface for selecting the oven function or selecting the oven temperature.



4.14 Power Board

The power board is located in the top panel area, and is held in place by plastic standoff clips.

The power board is connected to the clock via a harness and controls the following components:

- Elements
- Door switch
- Temperature sensor
- Door lock
- Lights
- Cavity fan
- Cooling fan

The power board is a GOEP type board. If being changed for any reason, the model ID must be selected for the product it is being fitted to.



4.15 Power Transformer

Voltage: 12v/240 50hz



4.16 Thermal Limiter

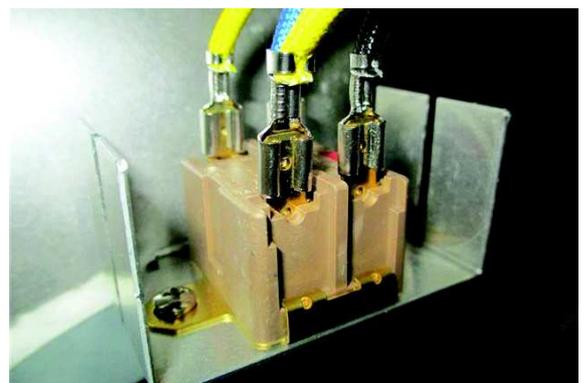
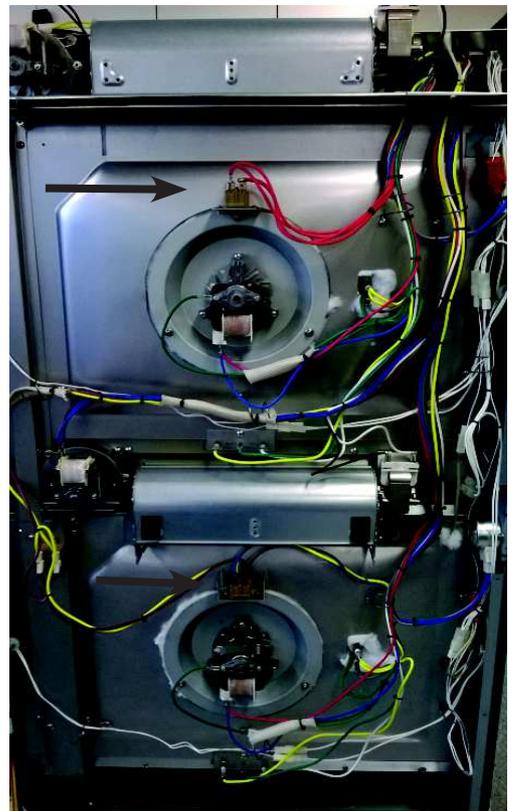
If a thermal limiter has tripped there will be no continuity across its contacts.

Double ovens have 2 thermal limiters , one on the upper cavity and one on the lower cavity.

Single ovens have one thermal limiter.

These are non-resettable thermal limiters positioned to detect a cooling fan failure. They will cut power to the oven elements when tripped.

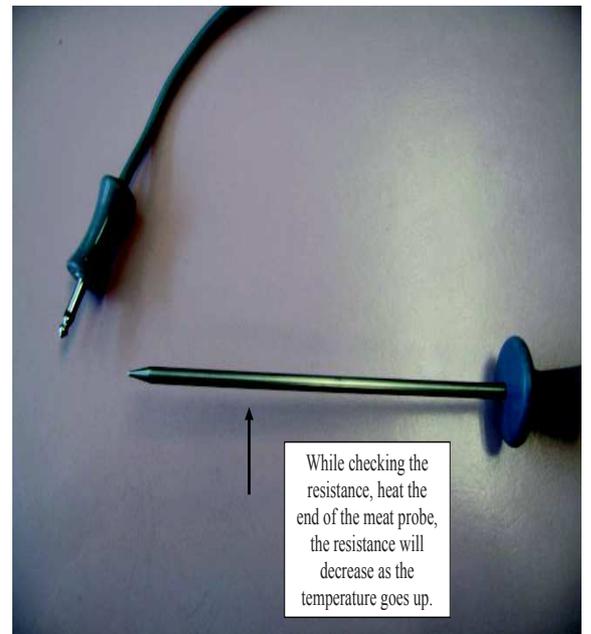
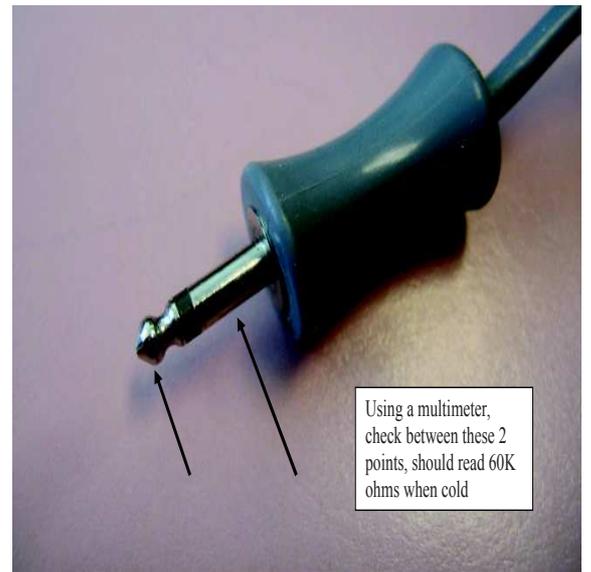
Capacity Rating: 16 Amps at 12 VDC
Trip Temperatures: 140°C



4.17 Meat Probe and Socket

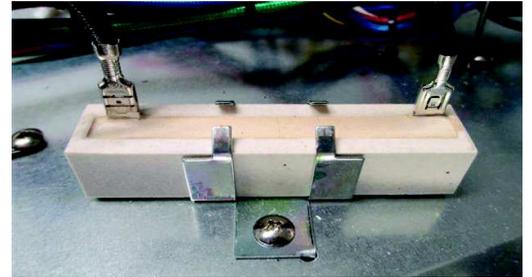
Voltage: 5 VDC

To test the meat probe:



4.18 Cooling Fan Resistor

Power Rating: 50 watt
Resistance: 220 Ohms
Max Ambient Temp: 85 °C



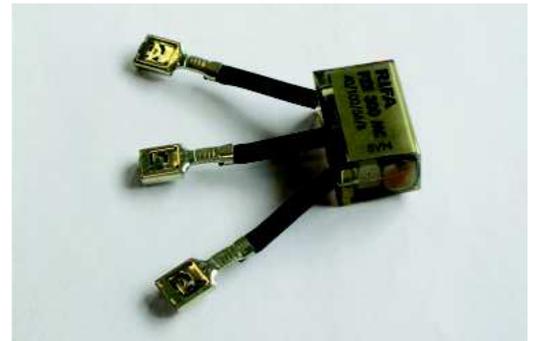
4.19 Isolation Relay

The isolation relay is now part of the main power board.

4.20 XY Capacitor

This capacitor provides surge protection for the oven.

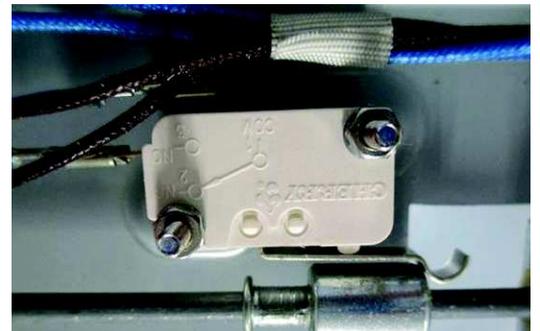
Voltage: 250 VAC
Class: X2Y2
Temp Range: - 40 to 100



4.21 Micro Switches

There are three micro switches in the door lock assembly.

Voltage: 12 VDC



4.22 Door Handle

The door handle is a D3 designer brushed stainless steel type.
The handle measurement is 727mm in width.
The depth of the handle from the front outer panel is 40mm.



4.23 Pyrolytic Self Clean

Duration:	4 or 5hr option
Pyro Temp:	440 °C
Heat-up time:	55 minutes approx.
Holding time:	145/205 minutes approx
Cool-down time:	40 minutes

If a Self-Clean Cycle will not start, check that there are no meat probes inserted and that the control knobs of the cavity that is not being cleaned (in a double oven) are in the 'OFF' position. The oven self-clean mode operates by heating the oven to a temperature of approximately 440 °C.

This burns off and breaks down soil and grease deposits. The ash residue that remains can simply be removed from the cool oven with a damp cloth or sponge.

To Start a Self-Clean Cycle:

- Turn the oven mode dial until 'Self Clean' icon appears lit on the control panel
- The display will flash '0:00' .
- Press the right scroll > button on the clock once to select the self clean cycle.
- The display will flash 5 hours, or press the right scroll > button to select the light clean option of 4 hours.
- The temperature display will be blank, as the temperature can not be adjusted.
- Press the tick button on the clock to start the self clean cycle.
- The time will start to count down.

How the Self Clean Cycle Operates:

The Grill inner element and the vent fan operate during the Self-Clean Cycle. Additionally, during the first fifteen seconds of each minute the bake element is on and during the third fifteen seconds of each minute the Grill outer element is on.

The cooling fan for the cavity being cleaned will be on high speed. The cooling fan for the other cavity will be on low speed.

During the Self-Clean Cycle in a double oven, the cavity not being cleaned cannot be operated in any mode.

The oven heats to its cleaning temperature and maintains this temperature for between approximately 2½ and 3½ hours into the cycle, depending on clean cycle selected.

The elements then turn off and the cool down period commences. When the temperature reduces to 180°C the door will unlock.

When the self-clean cycle has finished, the product will emit a long tone and after a few seconds the display will show the time of day.

At the completion of the self-clean cycle, there may be grey ash deposited on the inside of the oven. The amount of ash is dependent on the amount of soil in the oven before cleaning. To remove the ash, wait until the oven has completely cooled. The bulk of the ash is easily removed with a small brush or dry cloth, then by wiping over with a damp cloth.

The self-clean mode can be cancelled at any time by pressing the X button on the clock, This will take approx 40 minutes. Do **NOT** turn off the mains power supply to the oven (wall switch).

Turning off the power while the oven is too hot may damage the oven and its surrounding cabinetry, as the cooling fans will be shut down. This will cause the cavity temperature to increase and will trip the non resettable thermal limiters, meaning the product will need to be removed from the joinery to replace them.

4.24 Oven Mode Elements and Fan Profiles

	Stage	Oven Fan 35W	Cooling Fan 60W	Lights 60W	Vent Fan 18W	Grill Outer Element 1500W	Grill Inner Element 2900W	Bake	Fan Element 2500W
Bake	preheat	X	X	X					X
	Cook		X	X		X(67%)		X	
Fan Bake	preheat	X	X	X					X
	Cook	X	X	X	X	X (67%)		X	
Fan Forced	preheat	X	X	X					X
	Cook	X	X	X	X				X
Grill	Cook		X*	X	X		X		
Maxi Grill	Cook		X*	X	X	X	X		
Fan Grill	Cook	X	X*	X	X	X	X		
Pasrty Bake	preheat	X	X	X					X
	Cook <210 °C	X	X	X	X			X	
	Cook >210 °C	X	X	X	X	X(40%)		X	
Roast	preheat (20min)	X	X*	X	X	X	X		
	Cook		X	X		X(67%)		X	
Classic Bake	preheat	X	X	X					X
	cook < 210 °C		X	X	X			X	
	>210 °C		X	X	X	X(40%)		X	
Warm	Cook		X	X	X	X(67%)		X	
Self Clean	<250 °C		X		X		X	X	
	>250 °C #		X*		X		X	X(50%)	
	>250 °C #		X*		X	X(50%)	X		

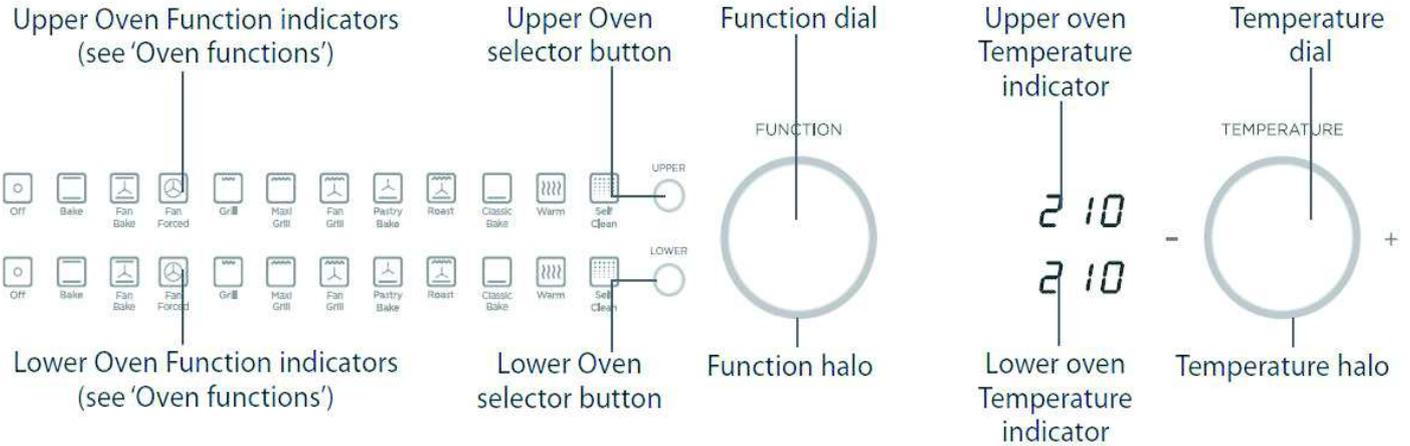
* = means cooling fan at high speed

= means these 2 profiles alternate every 30 seconds.

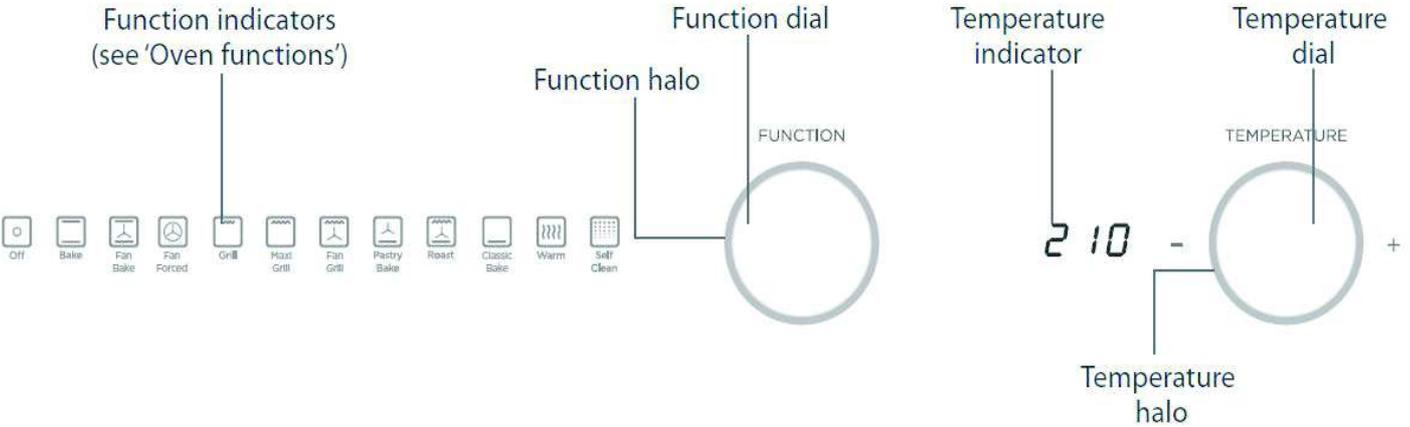
5 OPERATION

5.1 Control Panels

Double Model

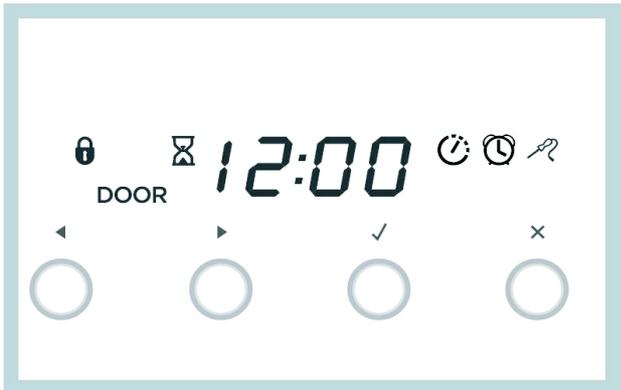


Single Model



5.2 Clock

The clock has 4 user interface buttons.



5.3 Setting the Clock

1. Power the oven on at the wall, the clock will start to flash 24 hr



2. Press the right scroll > button on the clock to change between 24 Hr and 12 Hr, then press the tick button to confirm.



3. Press the right and left scroll < > buttons to set the time of day.



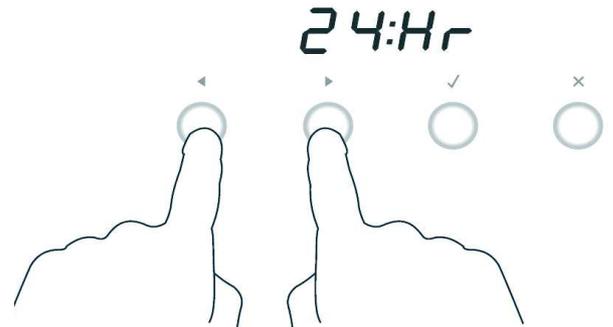
4. Press the tick button to confirm



5.4 To Change the Time

1. Press and hold the left and right scroll < > buttons together for 3 seconds to enter the user preference menu.

The display will either show 12 Hr or 24Hr



2. Press the tick button to confirm.

The display will flash.



3. Press the right scroll > button on the clock to change between 24 Hr and 12 Hr, then press the tick button to confirm.



4. Press the right and left scroll < > buttons to set the time of day.



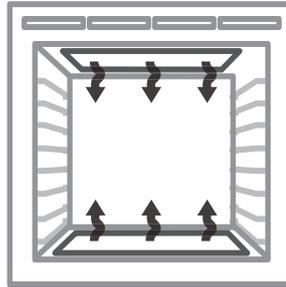
5. Press the tick button to confirm.



5.5 Oven Functions



Bake



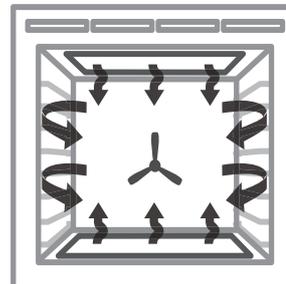
upper outer and lower elements

- Heat comes from both the upper and lower elements. The fan is not used in this function.
- Ideal for cakes and foods that require baking for a long time or at low temperatures.
- This function is not suitable for multi-shelf cooking.

Ideal for moist foods that take a longer time to cook eg rich fruit cake.



Fan Bake



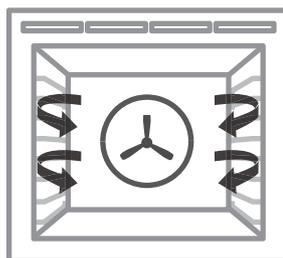
fan plus upper outer and lower elements

- The oven fan circulates hot air from the top outer and the lower elements and distributes it around the oven cavity.
- Food cooked tends to brown more quickly than foods cooked on the traditional **Bake** function.
- You may need to decrease the time from that recommended in traditional recipes.
- Use **Fan Bake** at a low temperature: 50°C for drying fruit, vegetables and herbs.

Ideal for single shelf baking that takes less than an hour to cook – foods such as muffins, scones and cupcakes or things like enchiladas.



Fan Forced



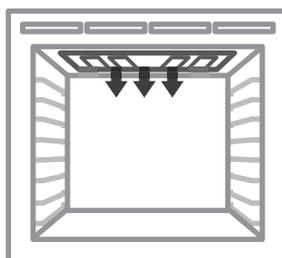
fan and rear element

- By using the central rear heating element and fan, hot air is blown into the cavity, providing a consistent temperature at all levels, making it perfect for multi-shelf cooking.
- Trays of cookies cooked on different shelves are crisp on the outside and chewy in the middle.
- Meat and poultry are deliciously browned and sizzling while remaining juicy and tender.
- Casseroles are cooked to perfection and reheating is quick and efficient.
- When multi-shelf cooking it is important to leave a gap between trays (eg use shelves 3 & 5) to allow the air to move freely. This enables the browning of foods on the lower tray.
- If converting a recipe from **Bake** to **Fan Forced**, we recommend that you decrease the bake time or decrease the temperature by approximately 20°C.
- For items with longer bake times (eg over an hour) it may be necessary to decrease both time and temperature.

Ideal for multi-shelf cooking biscuits, cookies, scones, muffins and cupcakes.



Grill



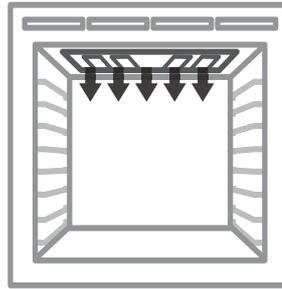
upper inner element

- Intense radiant heat is delivered from the inner top element. There are 9 steps between 'Lo' and 'Hi' (100% power).
- Preheating is not essential although some people prefer to allow the element to heat for a few minutes before they place food under the grill.
- The temperature halo will remain red while using the grill function.
- The most suitable function for 'finishing off' many meals, for example browning the top of potato gratin and frittata.

Ideal for toasting bread or for top browning to 'finish off dishes'.



Maxi Grill



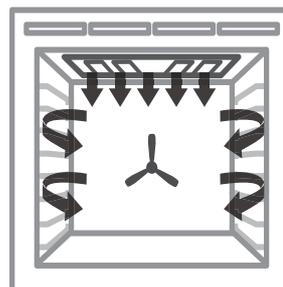
upper inner and outer elements

- Intense radiant heat is delivered from both top elements. There are 9 steps between 'Lo' and 'Hi' (100% power).
- Preheating is not essential although some people prefer to allow the element to heat for a few minutes before they place food under the grill.
- The temperature halo will remain red while using the grill.
- The most suitable function for 'finishing off' many meals, for example browning the top of potato gratin and frittata.

Ideal for toasting bread or for top browning to 'finish off dishes'



Fan Grill



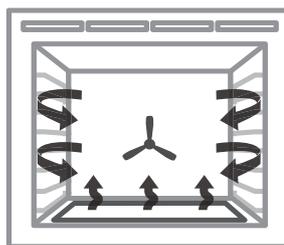
fan plus upper inner and outer elements

- This function uses the intense heat from the elements for top browning and the fan to ensure even cooking of foods.
- Meat, poultry and vegetables cook beautifully; food is crisp and brown on the outside while the inside remains moist and tender.

Ideal for whole chicken, tenderloin of beef or grilling your favourite chicken, fish or steak.



Pastry Bake



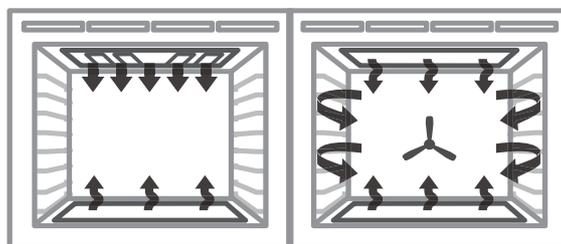
fan plus lower element

- The fan circulates heat from the lower element throughout the oven.
- Excellent for cooking pizza as it crisps the base beautifully without overcooking the topping.

Ideal for foods such as sweet and savoury pastry foods and delicate foods that require some top browning eg frittata, quiche.



Roast



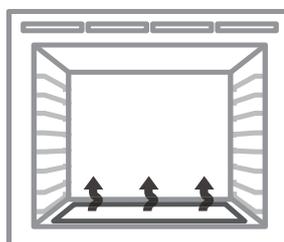
fan plus upper and lower elements

- A two-step program. An initial 20 minute searing stage crisps and browns the roast and caramelises the outside of the meat, then the temperature drops to the level you have preset for the remainder of the cooking period, producing a tender and juicy roast that is full of flavour.
- Oven does not require preheating.
- If desired, use the grill rack, grid or place vegetables under the roast to allow the juices to drain away from your meat. This will allow the hot air to circulate under the meat as well.

Ideal for Roasting meat, chicken and vegetables.



Classic Bake



lower element only

- Heat comes from the lower element only, the fan is not used.
- This is the traditional baking function, suitable for recipes that were developed in older ovens.
- Bake on only one shelf at a time.
- The oven will be hotter at the top.

Ideal for foods that require delicate baking and have a pastry base, like custard tarts, pies, quiches and cheesecake or anything that does not require direct heat and browning on the top.



Warm

this is not a cooking function

- Provides a constant low heat of less than 90°C.
- Use to keep cooked food hot, or to warm plates and serving dishes. To reheat food from cold, use another oven function to heat the food piping hot and only then change to Warm, as this function alone will not bring cold food up to a high enough temperature to kill any harmful bacteria.
- Use the Warm function to prove bread. See 'Tips for proving bread'.



Self Clean

this is not a cooking function

- The Self Clean cycle takes care of the mess and grime that is traditionally associated with oven cleaning.
- There are two Self-Clean cycles available:
 - Self clean (which takes 5 hours) for normal cleaning and
 - Light self-clean (which takes 4 hours) for lightly soiled ovens.
- See 'Using the Self Clean function' in the User guide for details.

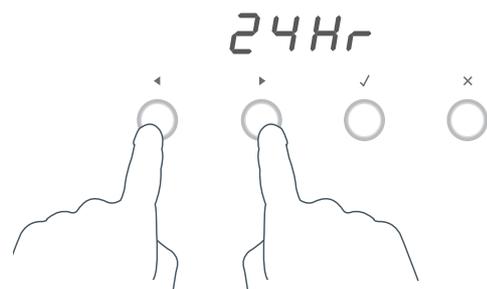
5.6 User Preference Settings

In the user preference setting, the oven can be changed to do the following:

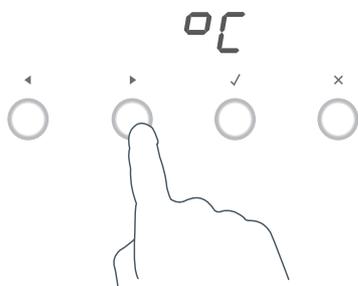
- display the temperature in degrees Celsius or Fahrenheit
- give audio feedback (tones and beeps) or operate quietly
- display time as 12-hr or 24-hr
- operate with the display off
- have its lights on or off during cooking
- operate in Sabbath setting (see 'Sabbath setting' following).

Note: You cannot change the user preference settings when your oven is operating or set for automatic cooking.

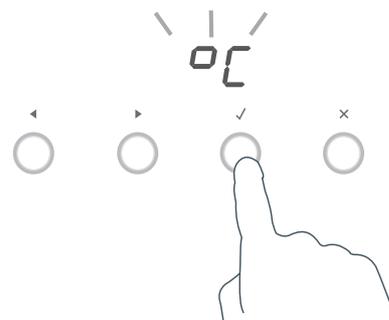
How to change preference settings



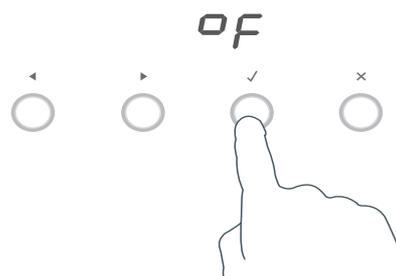
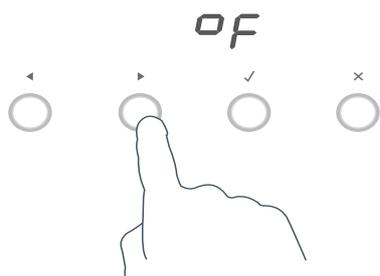
- 1 Check the function dial(s) are set to OFF and the display shows the time of day.
 - If you're unsure, press the cancel × button twice.
- 2 Press and hold the scroll ◀ ▶ buttons together for 3 seconds to enter the user preference menu.



- 3 Press the right scroll ▶ button to scroll to the setting you want to change. Refer to the following table.



- 4 Press the select ✓ button to select the particular setting.
 - The display will flash.



5 Press the right scroll ► button to scroll through the options for that particular setting. Refer to the table below.

6a Press the select ✓ button to save the new option .
 6b For all options except 'Display off' : press the cancel × button to quit the user preference menu.

Setting	Default option	Alternative option(s)	
TIME SCALE & 'DISPLAY OFF' OPTION <i>Select between 24-hr or 12-hr clock display (and set the clock) or set 'Display off' option if you only need the basic functionalities of your oven.</i>	24 HR 24 Hr	12 HR 12 Hr	DISPLAY OFF ** o F F
TEMPERATURE SCALE <i>Select between degrees Celsius or Fahrenheit.</i>	CELSIUS o C	FAHRENHEIT o F	
AUDIO FEEDBACK <i>Turn the beeps and tones on or off.*</i>	BEEPS/TONES ON b P o n	BEEPS/TONES OFF b P o F	
OVEN LIGHTS <i>Have the light off during cooking if you want to save power or want the food you cook to be a surprise for others!</i>	LIGHTS ON DURING COOKING L t o n	LIGHTS OFF DURING COOKING L t o F	
SABBATH SETTING	SABBATH OFF S b o F	See 'Sabbath setting' for instructions.	

* The timer tone and alert beeps will sound even if you save the **BEEPS/TONES OFF** option.

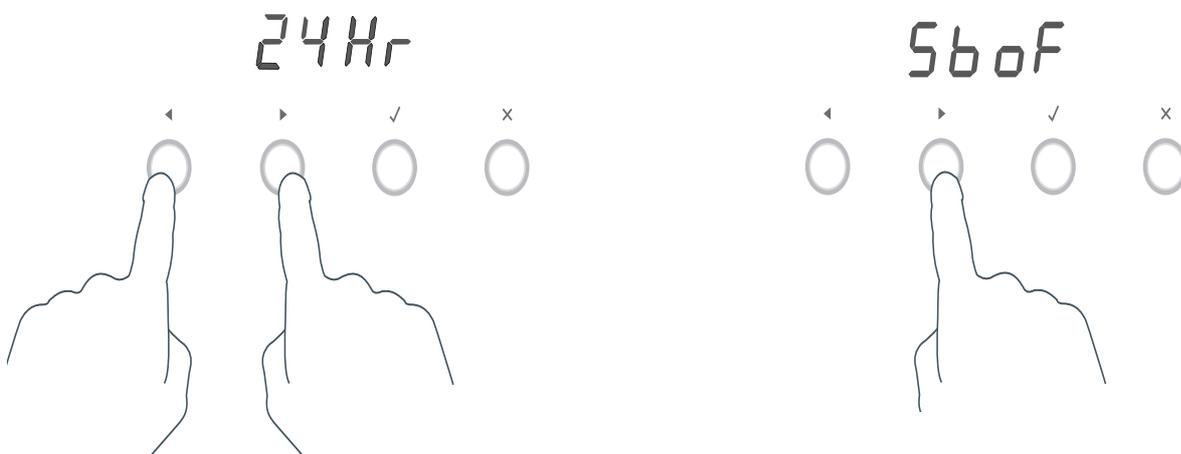
** With this option saved, you can still use the oven, meat probe and timer. The display will remain otherwise unlit. Any automatic or timer functions will be cancelled when this option is selected. To quit this option and enable the display, press and hold the cancel × button.

5.7 Sabbath Mode

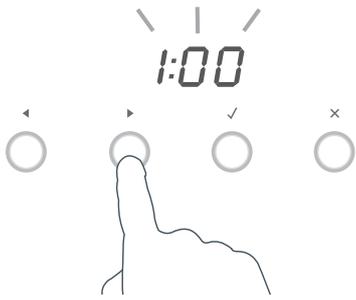
While your oven is in Sabbath setting

- The display, dial halos and indicators will be unlit, the buttons will be unresponsive.
- No tones or beeps will sound.
- No alert codes or temperature changes will be displayed.
- The oven lights will stay on. If you want the oven lights to be off during Sabbath setting, first select the 'Lights off' option as described in 'User preference settings', and only then set Sabbath setting.
- Bake  is the only function available in Sabbath setting.

How to set Sabbath setting



- 1** Press and hold the scroll ◀ ▶ buttons together for 3 seconds to enter the user preference menu.
- 2a** Press the right scroll ▶ button to scroll to the Sabbath setting.
- 2b** Press the select button to select Sabbath setting.
 - The default option is 'Sabbath off'.

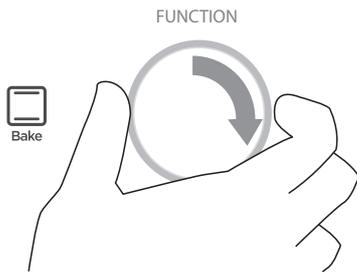


- 3 Press the select ✓ button to activate the option.
 - The display will flash 1:00.

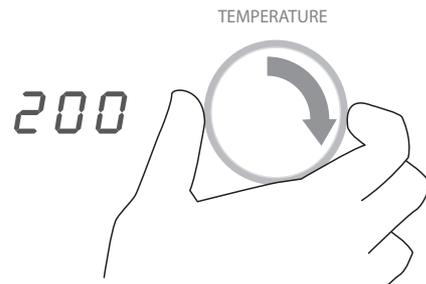


- 4a Press the scroll ◀ ▶ buttons to set the time (hrs). You may set the time for up to 99 hours.

- 4b **Double oven models only:**
Select the oven(s) you wish to use by pressing the UPPER or LOWER oven selector button



- 5 Turn the function dial to **Bake**.



- 6a Adjust the temperature.

- 6b **Double oven models only:**
If required, repeat the process for the second oven (by pressing UPPER or LOWER at step 4b)

- 7 Press the select ✓ button to activate.

The display, indicators and dial halos will be unlit and unresponsive, but the oven will be on until the time set elapses or you quit Sabbath setting.

To quit Sabbath setting

Press and hold the cancel × button until the time of day appears in the display and the oven(s) turn off.

6 DIAGNOSTICS

6.1 Entering the Technician Mode

NOTE: The OB76 oven uses the GOEP Electronic Platform controller, which is a universal controller used in other OB models. Ensure the correct model ID is selected for the model you are working on. Also ensure you are selecting the correct cavity when testing the functional menu.

To enter the mode:

1. Ensure all oven modes and temperature displays are set to OFF.
2. Ensure no cooking auto functions are set.
3. Enter the Technician Mode by pressing and holding the “Cancel Button” (X) on the clock for approx 8 seconds, then release the button.
4. Then press the “OK Button” (✓) once on the clock.
5. Push & hold the < > buttons together for 4 seconds.

The display will then show the word “wait” as it does a self check between the user interface (UI) and power board (PB).



6. To scroll through the five sub menu's use the < > buttons.
7. To enter a sub menu press the “OK” (✓) button.
8. To exit a sub menu press the (X) button.

6.2 Technician Mode Navigation

Once in technician mode there are 5 menus to choose from:

Menu 1: Elements

This is the functional menu, which allows individual components to be test run.

- To scroll to each component use the <> Buttons
- To turn the component on and off use the “OK Button”(✓)



a list of components is on the following page

6 DIAGNOSTICS

Symbol	Component	Wattage (W)
UI	Upper Inner Element	2900
Uo	Upper Outer Element	1500
LI	Lower Inner Element	1500
Lo	Lower Outer Element	not used in OB76
FE	Fan Element	2500
CF	Cavity Fan	30
LF	Low Speed Cooling Fan	20
HF	High Speed Cooling Fan	60
ro	Rotisserie motor	not used in OB76
Lt	Lights	100
UV	Upper vent actuator/vent fan	Will run vent fan in OB76
LV	lower vent actuator	not used in OB76
LC	Lock Motor 1. Door Switch must be in the closed position 2. Short delay and LCD will display "ON" 3. Will show "of" when turned off	40

Menu 2: Model ID

This menu will show the model ID of the product, to enter press the "OK Button" (✓) A number will be displayed, and will scroll in the display, ensure the correct region is set as there are different cooking profiles for different models.



Note: If changing a power board or clock module, always check that the correct model ID is set for the product you are working on.

The following model IDs are available and are market and model specific:

- 0 - no model set
- 1 - OB60SL9
- 2 - OB60SL11
- 3 - OB76 single cavity**
- 4 - OB76 double cavity**
- 5 - OB30 single cavity high spec US
- 6 - OB30 double cavity high spec US
- 10 - OB30 single cavity low spec US

6 DIAGNOSTICS

Menu 3: Software Version

This menu will show the software version of the electronics, it will scroll through the User Interface (UI) and power board (Pb) software and will advise the following:



ww.xx.yy.zz

The individual identifiers describe:

ww:

Safety version. Increments on approved changes to the safety critical software section. A change will result in a new checksum for the safety critical program code.

xx:

Major functional software version. Increments on production releases that added major functionality such as support for new products.

yy:

Minor functional software version. Increments on all other production releases that are not classified as major.

zz:

Development version. Increments on internal releases.

Menu 4 : Demo Mode

To enter this sub menu press the “OK” (✓) button.

If set to on, the oven heating elements and the cooling fans will stay off, but the lights and display function will operate, which is ideal in a retail shop.

This setting survives the power being switched off, and has to be manually switched off before the oven will resume normal operation.



Menu 5: Life Test Mode

Note: This menu is not used in the field. It is for factory use only.

7.1 User Alert Codes

	Possible Cause	What to Check
A1	<p>The oven has overheated :</p> <p>The temperature around the power board is too hot.</p> <p>The temperature around the clock board is too hot</p>	<ul style="list-style-type: none"> • Power Board, Clock Board or cavity over-temperature. • Let the oven cool down, the alert should clear itself. • If this alert happens frequently, check the cooling fan(s) for proper operation. Make sure the oven is not used in a hot environment and that it can emit its heat properly. • Replace the cavity temperature sensor. • Replace the Power Board. • Replace the Clock Board.
A2	<p>Door lock error: the door cannot be locked after a self clean cycle has been started.</p>	<p>Door can not be locked</p> <ul style="list-style-type: none"> • Make sure the door and the lock system are properly aligned, so the lock can engage into the door. • Check/replace thermal limiter(s) which may have cut power to the lock motor. • Check whether the lock motor turns. • Check the lock/unlock switches + connector to the power board. • Check the lock/unlock relay on the power board. • Replace the lock system. • Replace the power board.
A3	<p>Door lock error: the door cannot be unlocked after a self clean cycle has finished.</p>	<p>Door can not be unlocked</p> <ul style="list-style-type: none"> • Refer to the procedure above (Door cannot be locked "A2") • You might need to press the door while unlocking, so the door lock can disengage.

7.2 Failure Alerts

Clock Board Faults

	Error	Description & Possible Solution
F1	01	<p>Initialization error. No master power board found.</p> <ul style="list-style-type: none"> • Check model ID is set correctly for the model you are working on, refer page 33. • Check harness connections to master power board. • Replace master power board.
	02	<p>Initialization error. No slave power board found.</p> <ul style="list-style-type: none"> • Check model ID is set correctly for the model you are working on, refer page 33. • Check the harness connections at the slave power board. • Replace the slave power board.
	03	<p>General software error.</p> <ul style="list-style-type: none"> • Try powering the oven off and on. If the problem persists, replace the Clock Board.
	04	<p>Communication error. The master power board does not respond in time or at all.</p> <ul style="list-style-type: none"> • Check connection to master power board. • If the problem persists, replace Power Board.
	05	<p>Communication error. The slave power board does not respond in time or at all.</p> <ul style="list-style-type: none"> • Check connection to slave power board. • If the problem persists, replace the slave power board.
	06	<p>Unknown model ID. The clock board does not support the model ID set on the power board.</p> <ul style="list-style-type: none"> • Turn product off and back on at the wall, check the model ID via technician mode, refer p32. • If the problem persists, replace clock module and set the correct model ID, refer p33.
	16 18	<p>Crystal Oscillator fault. This can occur during baking with a lot of condensation.</p> <ul style="list-style-type: none"> • Let the oven cool down and dry out. Then power the oven off and on. • If the problem persists, replace the Clock Board.
	10 11 12 13 14 15 17 19 20 21	<p>Critical software/hardware fault.</p> <ul style="list-style-type: none"> • Try powering the oven off and on. If the problem persists, replace the clock board.

Power Board Faults

2 = Master Power Board (upper cavity)

3 = Slave Power Board (lower cavity)

Type	Error	Description & Possible Solution
F2/3	01	Initialization error. No Clock Board found. <ul style="list-style-type: none"> • Check connection to Clock Board. • Replace Clock Board.
	02	Unknown Model ID. The Power Board does not support the Model ID that is tried to be set through Technician Mode or restored by the old Clock Board (when Power Board is being replaced). <ul style="list-style-type: none"> • Make sure you are setting the correct Model ID. • If the problem persists, try another power board spare that may have a later version of software in it. • Once the oven is working again, check via Technician Mode that the Model ID is correctly set, p33.
	03	General software error. <ul style="list-style-type: none"> • Try powering the oven off and on. If the problem persists, replace the Power Board.
	04	Communication error. The Clock Board does not respond in time or at all. <ul style="list-style-type: none"> • Check connection to Clock Board. • If the problem persists, replace Clock Board.
	05	Door lock mechanism error. <ul style="list-style-type: none"> • Check lock mechanism for obstruction. • Check alignment of lock slot in door.
	07	Self Clean Door fault. The door was opened during a self clean cycle. <ul style="list-style-type: none"> • Make sure the user did not try opening the door during self clean. • Check the door switch and its connection to the Power Board. • Replace the door switch. • Replace the power board.
	13 14	Cavity temperature sensor found to be open/short circuit. <ul style="list-style-type: none"> • Check the harness of the cavity sensor to the power board + connector. • Replace the cavity sensor (plug into board before replacing). • Replace the power board.
	16	Cavity not heating up (sensor sees no change in temperature). Use Bake function from cold to evaluate this fault, it takes at least 10 minutes to fault out when no change in temperature is seen. <ul style="list-style-type: none"> • Check with customer how/when the fault occurred. Certain load configurations could trip this fault. • Check/replace thermal limiter(s) which may have cut power to the heating elements. • Check each heating element via technician mode to ensure they are operating. • Replace the power board. • Replace the cavity sensor.
	17	Door lock is not in its unlocked position. <ul style="list-style-type: none"> • Check/replace thermal limiter(s) which may have cut power to the lock motor. • Check whether the lock motor turns. • Check the lock/unlock switches + connector to the power board. • Check the lock/unlock relay on the power board. • Replace the lock system. • Replace the power board.

Type	Error	Description & Possible Solution
F2/3	20 22	Crystal Oscillator fault. This can occur during baking with a lot of condensation. <ul style="list-style-type: none"> Let the oven cool down and dry out. Then power the oven off and on. If the problem persists, replace the Power Board.
	10 11 12 15 18 19 21 23 24 25	Critical software/hardware fault. <ul style="list-style-type: none"> Try powering the oven off and on. If the problem persists, replace the Power Board.

7.3 Symptom: Oven under cooking

POSSIBLE CAUSES:

- Incorrect oven use
- Incorrect temperature scale used
- Faulty temperature sensor
- Faulty oven element
- Faulty oven cavity fan
- Blown thermal limiter
- Faulty power module

DIAGNOSIS:

- Check that the oven is being operated correctly.
- Ensure the oven door closes and seals correctly.
- Ensure the correct temperature scale has been set. (°F or °C).
- Check that the correct oven mode has been selected.
- Check temperature sensor
- Check for tripped thermal limiters.
- Check oven elements in diagnostics
- Check oven cavity fans in diagnostics
- Replace the power module if no other faulty components can be found
- Check door switch

7.4 Symptom: Baking burns on top

POSSIBLE CAUSES:

- Incorrect oven use
- Incorrect temperature scale used
- Faulty temperature sensor
- Faulty oven element
- Faulty oven cavity fan
- Faulty power module

DIAGNOSIS:

- Check that the oven is being operated correctly.
- Ensure the correct temperature scale has been set. (°F or °C).
- Check that the correct oven mode has been selected.
- Check temperature sensor
- Check oven elements in technician mode
- Check oven cavity fan in technician mode.
- Replace the power module if no other faulty components can be found.

7.5 Symptom: Baking burns on the bottom

POSSIBLE CAUSES:

- Incorrect oven use
- Incorrect temperature scale used
- Faulty temperature sensor
- Faulty oven element
- Faulty oven cavity fan
- Faulty power module

DIAGNOSIS:

- Check that the oven is being operated correctly
- Ensure the correct temperature scale has been set (°F or °C)
- Check that the correct oven mode has been selected.
- Check temperature sensor
- Check oven element in diagnostics
- Replace the power module if no other faulty components can be found.

7.6 Symptom: Oven seems to be operating normally but not heating

POSSIBLE CAUSES:

- Faulty oven door switch or door not closed
- Tripped thermal limiter
- Faulty temperature sensor
- Faulty oven element
- Faulty power module

DIAGNOSIS:

- Check to see if the door switch is operating correctly
- Check for tripped thermal limiters.
- Check temperature sensor
- Check oven element in diagnostics
- Replace the power module if no other component faults can be found.

7.7 Symptom: Oven heats slowly or fails to reach preset temp

POSSIBLE CAUSES:

- Incorrect oven use
- Faulty door switch
- Low supply voltage
- Faulty temperature sensor
- Faulty oven element / fan
- Faulty power module

DIAGNOSIS:

- Ensure the oven door closes and seals correctly.
- Check door switch
- Check temperature sensor
- Check oven element in diagnostics
- Replace the power module if no other component faults can be found.

7.8 Symptom: Oven works but no display

POSSIBLE CAUSES:

- Oven is set to "Display OFF" mode.

DIAGNOSIS:

- Hold "Cancel" button (X) down for more than 2 seconds to clear.

7.9 Tracing Cooling Fan Faults

PROCEDURE:

If the cooling fan will not start

1. Enter technician diagnostic mode to test the cooling fan operation. (refer section 6 on page 32)
 - The cooling fan will operate at low speed in normal operation. When the cooling fan is turned on in diagnostics it will run at high speed.
2. Test for the correct voltage across the cooling fan contacts. Replace the fan if tests are good.
3. If no power, check the fan wiring continuity back to the power module.
 - If the wiring continuity is good then it is likely that the cooling fan is not faulty.
4. Replace the power module.

If the cooling fan will not turn off

1. Check for temperature sensor faults. (refer to Section 7.13)
 - The cooling fan will operate at low speed until the cavity temperature is below 150°C (300°F). If the cavity temperature is above 270°C (520°F) the cooling fan will operate at high speed.
2. Replace the power module if no other component faults can be found.

7.10 Tracing Cavity Fan Faults

PROCEDURE:

If oven cavity fan will not operate

1. Enter technician diagnostic mode to test the oven cavity fan operation. (refer to section 6, page 32)
2. If the oven cavity fan operates in diagnostics but not in normal operation. Check for door switch faults. (refer to Section 7.15)
3. If the door switch is OK, and cavity fan not operating, test for 220/240volts across fan contacts. If voltage at fan contacts but not operating, replace the cavity fan.
4. If no voltage, check the continuity of the fan wiring circuit back to power module including thermal limiters.
5. If the wiring continuity is good, then it is likely that the oven cavity fan is not faulty. Replace the power module.

If the oven cavity fan will not turn off

1. Replace the power module if no other component faults can be found. The cooling fan relay may be faulty.

7.11 Tracing Light Faults

PROCEDURE:

If light bulb is not working

1. Replace halogen bulb. (refer to Section 8.12)

If all the lights will not turn on or replacing the bulb/s did not fix the problem.

1. Check for 12VAC to lamp assemblies from the transformer.
 - Replace the lamp assembly if there is voltage present but light still not operating. (refer to Section 8.13)
2. If no power, check the supply voltage from power module to the transformer.
 - Replace the power module if no voltage supplied to transformer. (refer section 8.6)

If the lights do not turn off

1. Check to see if the door switch is faulty.
 - If the faulty door switch cannot be easily repaired, replace the door lock assembly.

7.12 Tracing Element Faults

PROCEDURE:

If the element does not turn off (element run-away)

Note: In normal operation the element will cycle (turn on & off) when the cavity temperature has reached the set point. This can be detected by listening for the switching noise of the element relay switch on the power module or using a current meter.

1. Check the temperature sensor is reading the correct temperature by using a digital thermometer, or check the resistance of the sensor, (refer section 4.8)
2. If the correct temperature is being read, isolate the supply and check that all the elements are wired correctly and the element relay switches haven't short-circuited at the power module.
 - Replace the power module.

If the element does not heat up

Note: Before testing refer to section 4.24 to find out which elements are used for each oven mode.

1. Check for a tripped thermal limiter. (refer sections 4.16 & 7.14)
2. Test the element operation in Technician Mode. (refer to Diagnostics Section 6)
3. If the element does not heat up in Technician Mode, test the resistance of the element. The appropriate range of resistance for each element is given in Table below. Replace the element if its resistance is outside the given range.

Elements	Min Resistance	Max Resistance
Upper Inner	18	22
Upper Outer	36	42
Lower	36	42
Fan	21	25

4. Check the continuity of the element wiring back to the power module, including the thermal limiters.
5. If the wiring continuity is good, it is likely that the element is not faulty.
 - Replace the power module.

7.13 Tracing Oven Temperature Faults

PROCEDURE:

1. Check the correct temperature scale (Deg C or Deg F) is being used, refer section 5.6 User Preference Setting.
2. Check the correct oven function is being used.
3. Check the door switch is operating correctly, refer to 7.15.
3. Check the temperature sensor resistance, refer to section 4.8
 - Replace the temperature sensor if outside it's range.
4. Replace the power module if temperature sensor readings are correct.

7.14 Tracing Limiter Faults

PROCEDURE:

1. Check the thermal limiter(s) for continuity across the limiter contacts.
2. Replace the faulty thermal limiter(s) with correct value (refer section 4.16).
3. Trace the component that is most likely to have caused the thermal limiter to trip.

To trace the likely cause of tripping

1. Enter technician mode to help determine the likely faulty component.
2. Trace the component fault. (top/bottom cavity)

Note: Thermal limiters are positioned in specific areas to detect certain components failing. These are the most likely causes of a thermal limiter tripping:

- Faulty cooling fan (stopped running).
- Faulty element/power module (element run-away).
- Faulty temperature sensor (incorrect reading)

7.15 Tracing Door Switch & Lock Faults

PROCEDURE:

Oven Door Switch

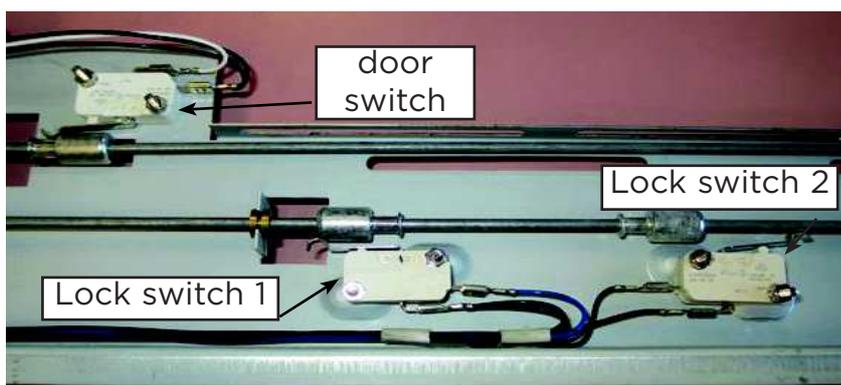
1. Push the door switch plunger in and out to ensure it is operating correctly. With no oven mode selected the light should turn on when the door is opened and turn off when door is closed.
2. If the oven lights do not switch ON and OFF then check the wiring continuity between the door lock assembly and the power module.
4. If the wiring continuity is good, replace the door lock assembly.

NOTE: during cooking modes the light can be turned off in the user preference section 5.6.

Door Lock Switches

Test to ensure the lock switch is switching properly in Technician Mode (refer section 6)

1. Use a multimeter to check that the door lock switch readings back to the power module are correct. When the door is not locked, Lock Switch 1 inputs should be closed circuit and Lock Switch 2 inputs should be open circuit. (The readings are vice-versa when the door is locked.)



2. Check the continuity and insulation resistance of the lock switch wiring
 - Replace the door lock assembly if a wiring continuity/insulation resistance fault cannot be repaired.
 - If the wiring continuity and insulation resistances are good, it is likely that these switches are not faulty.

8 SERVICING THE COMPONENTS

WARNING!

Ensure the product is isolated from the power supply before servicing. Follow the health and safety precautions while servicing.

8.1 Removal from the Joinery

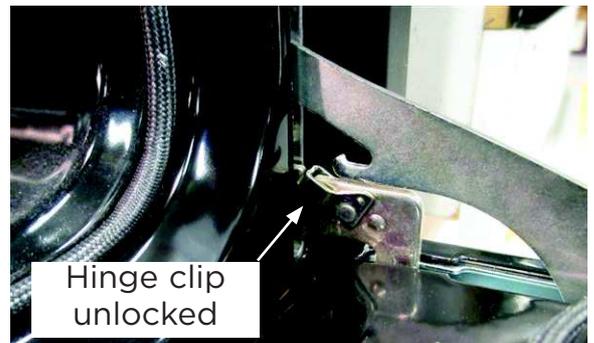
1. Ensure the product is isolated from the power supply.
2. Remove the oven doors, shelves and utensils.
3. Remove the two screws on either side of the oven frame that secure the oven to the joinery.
4. Slide the oven out of the cavity onto a suitable support that is capable of holding the weight of the product.

Warning! This oven is heavy and care should be taken to use correct lifting techniques.

8.2 Removal of the Door

Removal

1. Open the oven door to its fully open position (90° to oven).
2. Pull the hinge clips on the lower arm of the hinges forward until they lock onto the upper arm.
3. Raise the door ensuring the clips load the top arm of the hinges.
4. Lift the oven door out of the hinge slots.



Reassembly

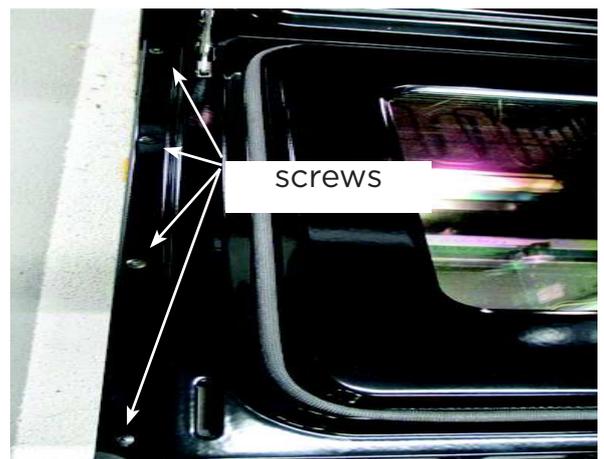
1. Place the hinge arms into the hinge slots ensuring they lock into place.
2. Ensure the oven door is opened fully, unlock the upper arm from the hinge clips.
3. Raise the door slightly and ensure the hinge clips are released from the upper arms.
4. Check the door closes and seals correctly.



8.3 Disassembly of the Door

To separate door inner and door outer assemblies

1. Remove the door from the oven. (refer to 8.2)
2. Lay the door face down on a flat, clean working surface.
3. Remove the four hinge screws on the bottom of the door and the eight retaining screws down the sides of the door.
4. Separate the inner and outer door assemblies.



Glass Pane Removal

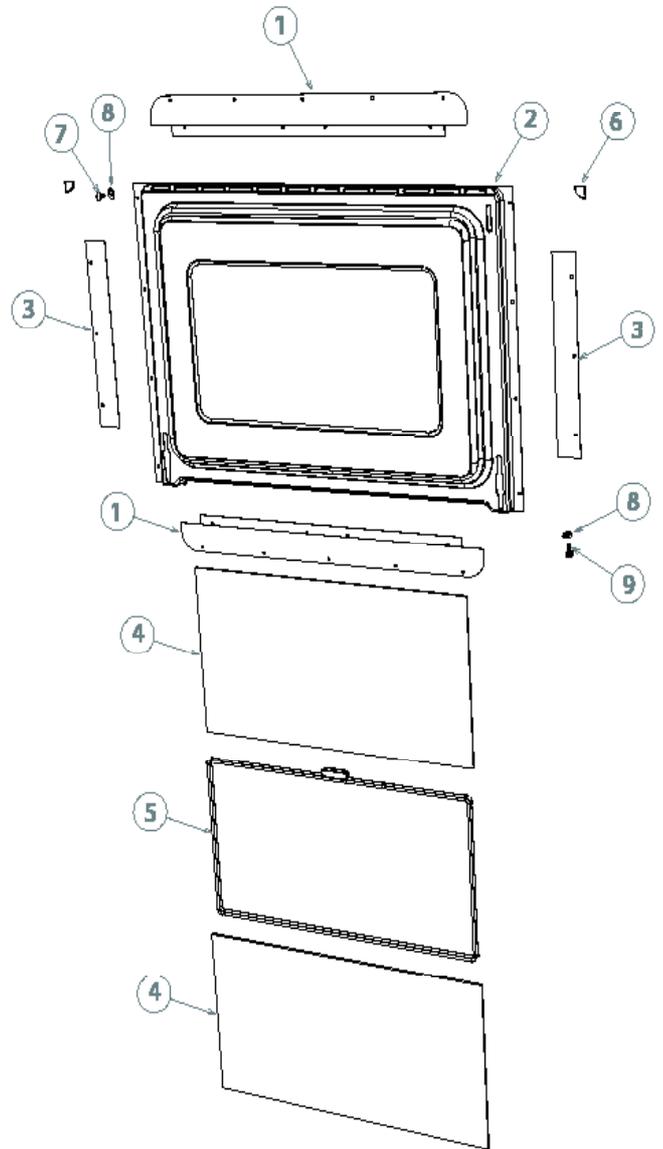
1. Remove the screws securing the top retaining bracket. (no. 1)
2. Loosen the screws on the insulation retainer panel. (no. 3)
3. Slide out the heat reflective glass pane. (no. 4)
4. Remove the inner glass pane and gasket.

Note: If transferring the gasket to a replacement glass pane then ensure the gasket join is located at the top of the door.

- Note:** The glass pane has a reflective coating on one side only. Ensure that the coating is facing AWAY from the oven cavity when reassembled.
- To test if a glass pane has a heat reflecting coating, use an ohmmeter to test for continuity on the glass surface. If there is continuity then the glass will be coated and it will read between 13-16 ohm.
 - The part number on the bottom L/H corner should be facing the customer.

Reassembly

- Refit in reverse manner.
- Ensure all glass surfaces are clean.



Handle Removal

1. Clear the insulation from around and remove the handle retaining screws in the top corners of the outer door assembly.

Reassembly

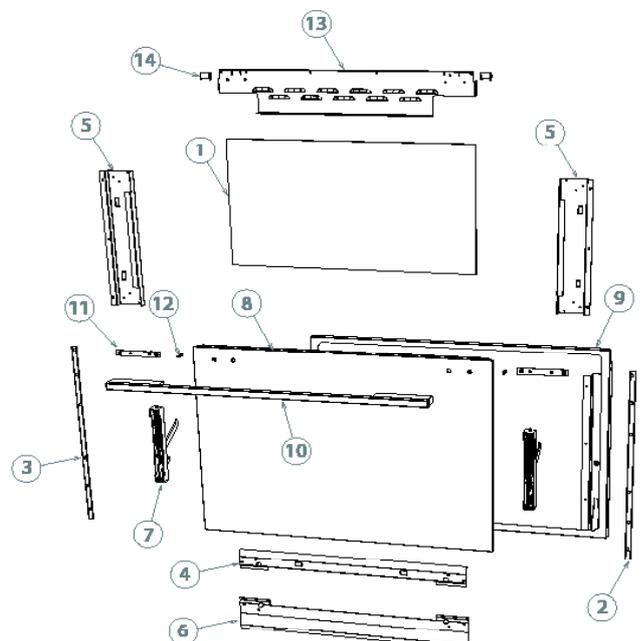
- Refit in reverse manner.

Glass Pane Removal

1. Remove the screws securing the heat shield panel.
2. Loosen the four screws securing the bottom flow guide panel.
3. Slide the heat reflective glass pane out from the bottom flow guide panel.

Reassembly

- Refit in reverse manner.



Hinge Removal (old style)

Door Hinge Removal

1. Remove the heat reflective glass pane. (refer p43)
2. Remove the door hinge retaining screw near the top of the stanchion.
3. Lift the door hinge and hinge stanchion enough to clear the edge of the door cap.

Caution: The inner edges of the stainless steel door cap are sharp.

4. Separate the door hinge from the hinge stanchion.



8.4 Removal of the Door (New hinge style)

Removal

1. Open the oven door to its fully open position (90° to oven).
2. Pull the hinge clips on the lower arm of the hinges forward until they lock onto the upper arm.
3. Raise the door ensuring the clips load the top arm of the hinges.
4. Lift the oven door out of the hinge slots.

Reassembly

1. Place the hinge arms into the hinge slots ensuring they lock into place.
2. Ensure the oven door is opened fully, unlock the upper arm from the hinge clips.
3. Raise the door slightly and ensure the hinge clips are released from the upper arms.
4. Check the door closes and seals correctly.



To separate the inner and outer door & remove the hinge

1. Remove the door from the oven.
2. Lay the door face down on a flat, clean working surface.
3. Remove the four hinge screws on the bottom of the door and the eight retaining screws down the sides of the door.
4. Separate the inner and outer door assemblies.
5. Remove the six screws holding the inner glass door assembly. 3 on each side.
6. Drill out the 4 rivets holding the stanchion to the door.
7. Lift the stanchion out and remove the hinge by removing the two screws.
8. Reassemble in reverse order.

NOTE:

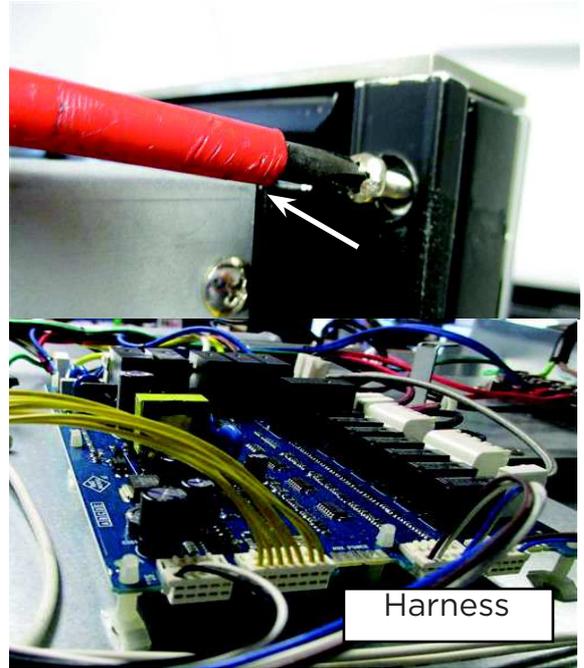
- You will need to rivet the stanchions back onto the door with 2 x 3mm rivets.
- Make sure the inner door sits inside the bottom of the outer door at the bottom.
- Make sure the gasket is sitting in the correct position at the sides when you put the inner door back on.
- Make sure the top of the inner door slots into the trim at the top.



8.5 Removal of the Control Panel

1. Ensure the product is isolated from the power supply.
2. Open the oven doors and remove the two screws on either side of the oven frame securing the oven to the joinery.
3. Slide the oven forward out of the joinery to gain access to the control panel screws, approx 200mm.
4. Remove the 4 screws securing the control panel, pull slightly forward to release from the frame and remove the wiring harness to the control module .

Warning! This oven is heavy to move and care should be taken to use correct lifting techniques.



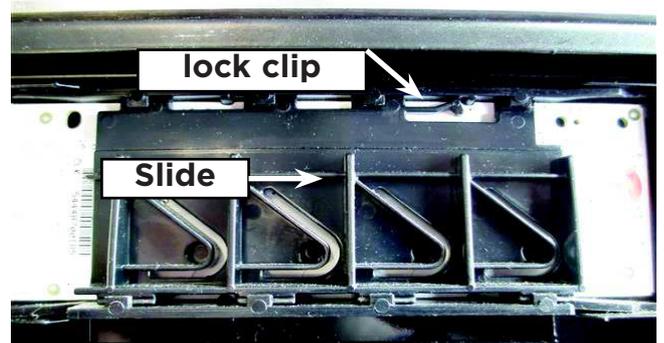
8.6 Disassembly of the Control Panel

The control panel is made up of a clock module, function module and a temperature module.

There are differences between double and single models, so ensure you order the correct parts from the correct parts book for the model you are servicing.

Clock Module Removal

1. Remove the wiring harnesses from the clock module.
2. Depress the locking clip and slide the securing bracket to release.
3. The bracket will be able to be removed.
4. Lift the module up to release from the control panel.



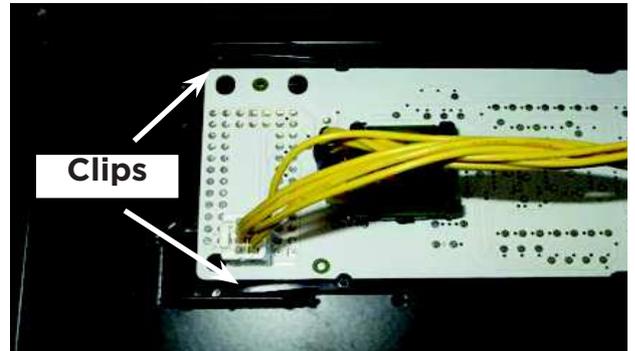
Function Board Removal

1. Remove the wiring harnesses from the function module.
2. Remove the knob by pulling it off the encoder shaft, and then remove the bezel by turning it anti clockwise to release. We recommend the use of a pair of long nose pliers.
3. With the bezel removed the encoder will now release from the function module.
4. To release the function module, depress the clips on the top corners of the housing and pull the function switch forward to release from the bracket.



Temperature Module Removal

1. Remove the wiring harnesses from the temperature module.
2. Remove the knob by pulling it off the encoder shaft, and then remove the bezel by turning it anti clockwise to release. We recommend the use of a pair of long nose pliers
3. With the bezel removed the encoder will now release from the temperature module.
4. To release the temperature module from the control panel, depress the clips on the top corners of the housing and pull the function switch forward to release from the bracket.



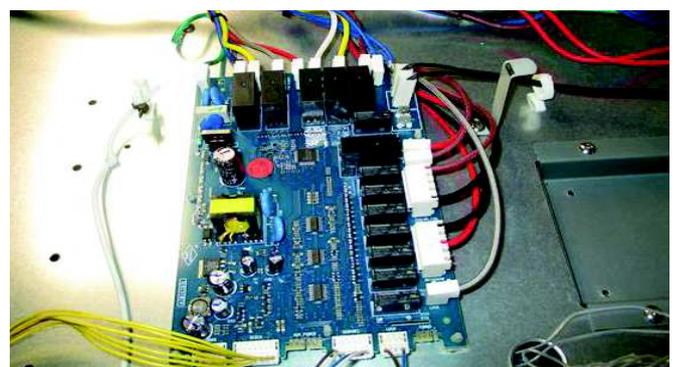
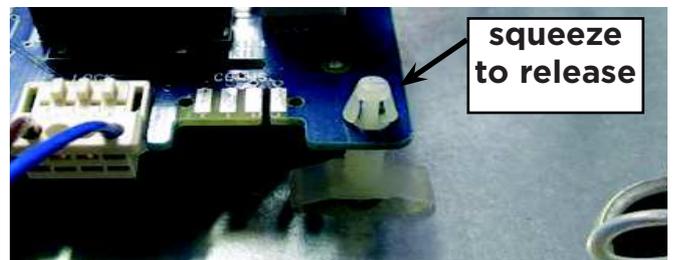
8.7 Removal of the Power Module

There are 2 power modules in a double model. The master board is the upper cavity module, and the slave board is the lower cavity module. Both these modules are connected via a harness and are located in the top panel area.

A single model only has one power module which is the master board.

Procedure:

1. Remove the oven doors. This makes the product lighter and easier to move, and will stop it tipping forward when pulled out from the joinery.
2. Remove the screws securing the product to the joinery and slide the oven forward out of the joinery approx 250mm.
3. Remove the 2 front service panel screws on either side and the front 2 rear panel screws.
4. Lift the service panel and slightly tilt to remove it from the control panel. Slightly raise the rear panel to gain access to the power module.
5. To remove the power module, use a pair of long nose pliers and squeeze the plastic standoff to release.
6. When replacing the power module ensure you take note of the wiring harness positions.
7. Reassemble in reverse order, and once powered on, ensure the model ID is set for the model you are working on, refer to page 33 for the model ID references.



8.8 Removal of a Power Transformer

1. Remove the oven doors. This makes the product lighter and easier to move, and will stop it tipping forward when pulled out from the joinery.
2. Remove the screws securing the product to the joinery and slide the oven forward out of the joinery approx 250mm.
3. Remove the 2 front service panel screws on either side and the front 2 rear panel screws.
4. Lift the service panel and slightly tilt to remove it from the control panel. Slightly raise the rear panel to gain access to the transformer.
5. To remove the transformer, disconnect the wires to the power module, and disconnect the wiring harness to the lights.
6. Remove the 4 securing screws to the transformer being replaced (doubles have 2 transformers).
7. Reassemble in reverse order, and once powered on, ensure the model ID is set for the model you are working on, refer to page 33 for the model ID references.

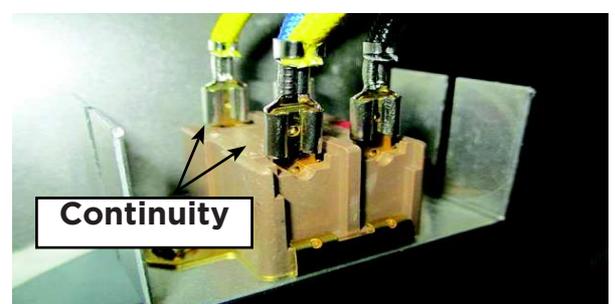


8.9 Removal of a Thermal Limiter

1. Ensure the product is isolated from the power supply.
2. Remove the oven doors, shelves and utensils as this will make the oven lighter to move.
3. Remove the two screws on either side of the oven frame that secure the oven to the kitchen joinery.
4. Slide the oven out of the cavity onto a suitable support that is capable of holding the weight of the product.

Warning! This oven is heavy and care should be taken to use correct lifting techniques.

5. Remove the rear panel of the oven to gain access to the thermal limiters.
6. The double models have 2 thermal limiters, single models only have one.
7. Using a multimeter, check for continuity across the contacts front to back on the limiter, not side to side. If open circuit replace the thermal limiter.
8. Before reassembly, check the cooling fan is operating in diagnostics, as a failed cooling fan may be the reason the thermal limiter has tripped.



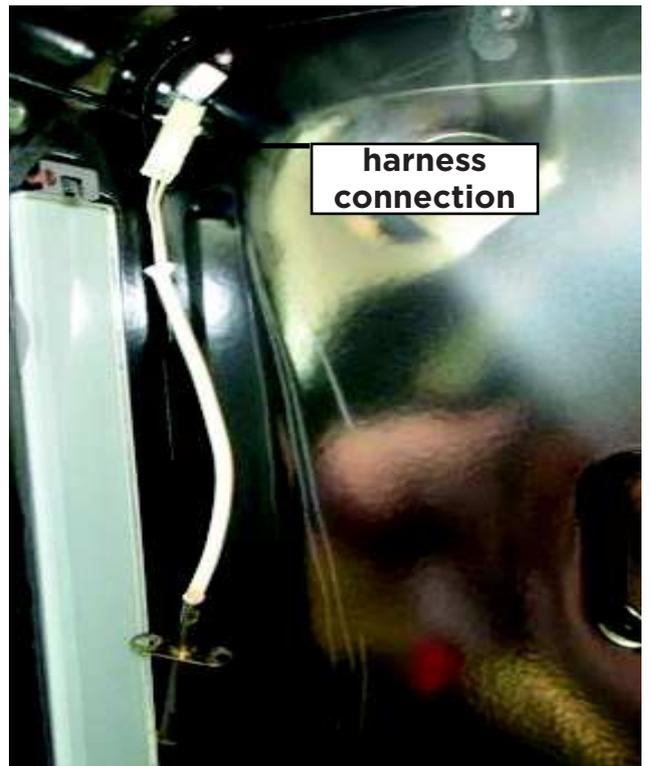
8.10 Removal of the Fan Shroud

1. Ensure the product is isolated from the power supply.
2. Remove the oven door and shelves.
3. Remove the two screws on either side at the top of the fan shroud.
4. Pull the shroud up slightly to remove the lower tabs from the cavity liner.
5. Reassemble in reverse order.



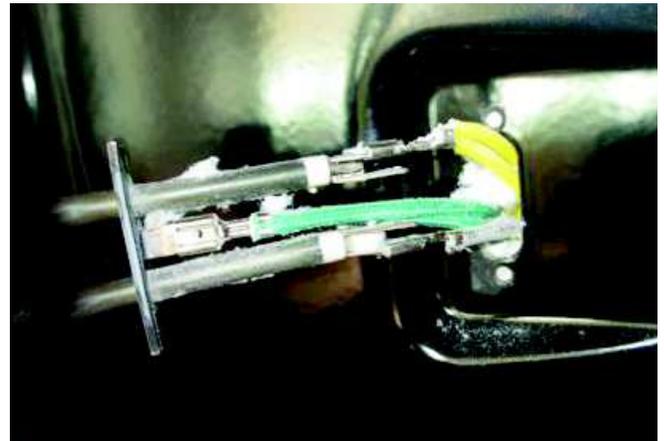
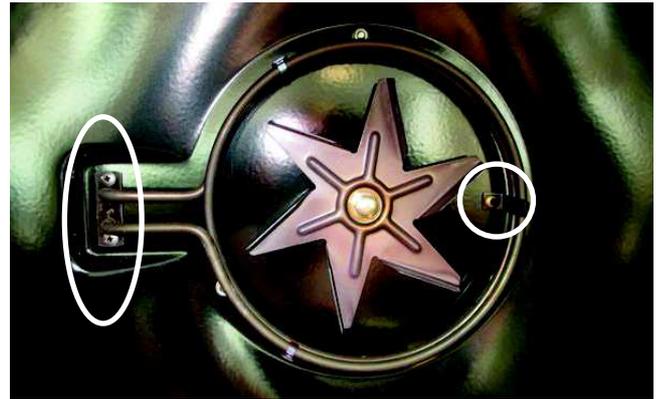
8.11 Removal of the Temperature Sensor

1. Ensure the product is isolated from the power supply.
2. Remove the oven doors and shelves.
3. Remove the fan shroud, refer 8.9.
4. Remove the 2 screws securing the temperature sensor, and pull forward to release. The harness connection is a tight fit, but will come through the cavity access hole.
5. Unplug the harness to release the sensor.
6. To test the temp sensor, refer to resistance chart on page 12.
7. Reassemble in reverse order.



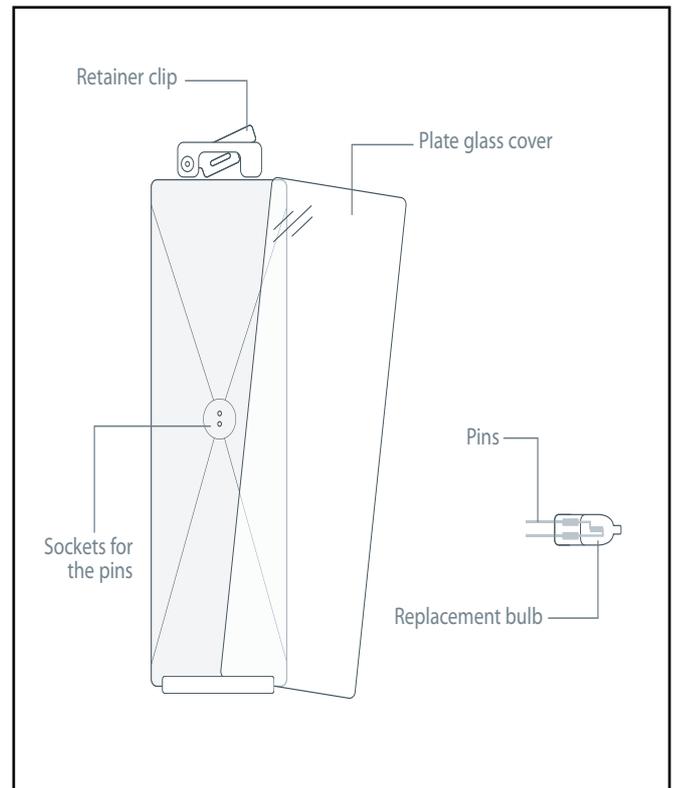
8.12 Removal of the Fan Element

1. Ensure the product is isolated from the power supply.
2. Remove the oven doors and shelves.
3. Remove the fan shroud, refer 8.9.
4. Remove the 3 screws from the element and retaining bracket.
5. The element tail will pull through far enough to remove the wiring.
6. Refit new element and reassemble in reverse order.



8.13 Removal of Oven Lamp Cover & Bulb

1. Remove the oven door and shelves to gain access to the side lamp covers.
2. Use a small flat-head screwdriver to twist and lift the retainer clip at the top of the glass light cover while holding the glass to prevent it falling. The clip pivots anti-clockwise (see the diagram).
3. Carefully lift the glass cover out of the lower support and pull out the faulty bulb.
4. Holding the replacement bulb in a soft cloth or tissue (touching the bulb will reduce its life span), insert the new bulb.
5. Reposition the glass cover and twist the top clip back in place. The procedure is the same for the light in the roof of the oven cavity.



8.14 Removing the lamp assembly

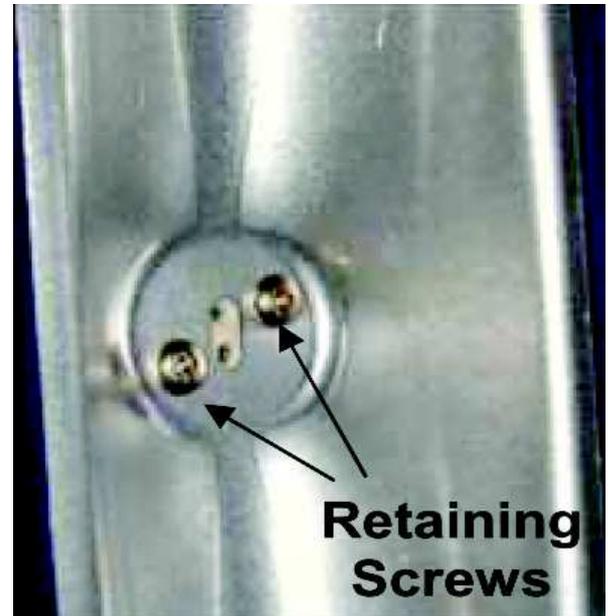
For rear lamp assemblies

1. Ensure the product is isolated from the power supply.
2. Remove the oven lamp cover as per section 8.12.
3. Remove the the lamp body retaining screws and the lamp holder retaining screws.
4. Disconnect the lamp assembly wires at the connectors in the back panel area.
5. Pull the lamp assembly wires out through the oven cavity.

Note: String can be tied on the end of the light assembly wires to aid in feeding the new wires back through the holes in the side insulation panel.

Reassembly

1. Feed the new wire connectors back through the hole in the side insulation panel.
2. Refit in reverse manner.



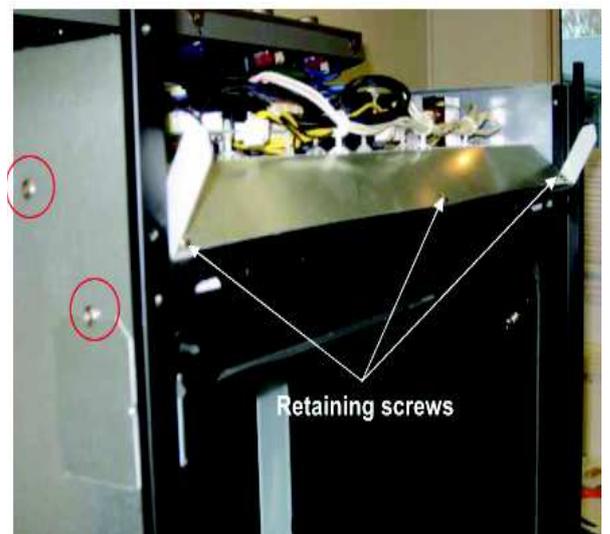
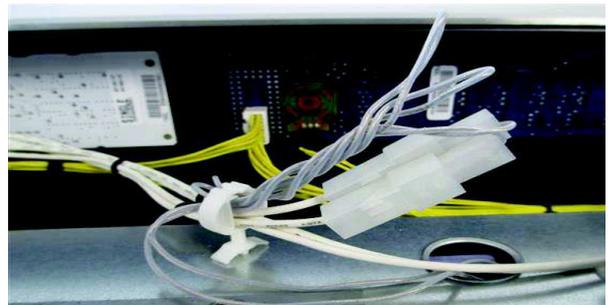
For front lamp assemblies

Removal

1. Remove the lamp cover and bulb, refer 8.12.
2. Disconnect the lamp assembly wires from the terminal blocks in the top panel area.
3. Remove the control panel, refer section 8.4.
4. Remove the three screws along the front of the wiring panel and the two screws either side fixing the wiring panel.
5. Lift the front of the wiring panel to access the lamp assembly and wires.
6. Remove the lamp holder retaining screws.
7. Feed the wires through the hole in the wiring panel.

Reassembly

1. Refit in reverse manner.

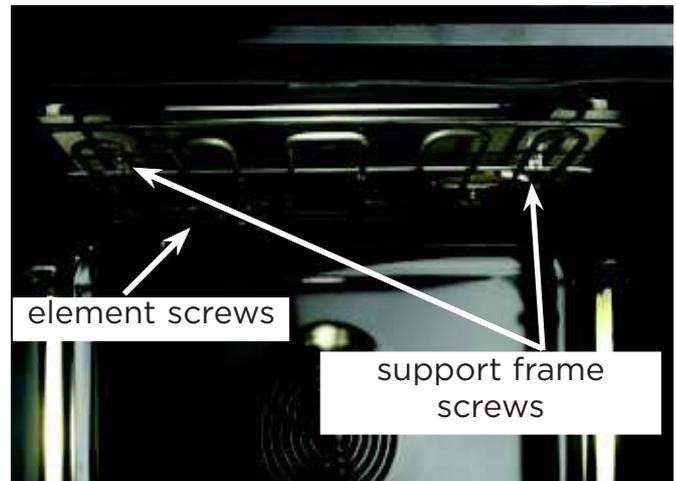


8.15 Removal of the Grill Element

1. Ensure the product is isolated from the power supply.
2. Remove the oven doors and shelves.
3. Remove the fan shroud, refer 8.9.
4. Remove the 2 screws securing the element and the 2 screws on the support frame on the cavity roof.
5. Pull the tail of the element through the hole in the cavity until the terminals are accessible.

Note: Tilt the element forward so that the element terminals will clear the hole in the oven cavity.

6. Disconnect the wiring and connect the replacement element.
7. Reassemble in reverse order.



8.16 Removal of the Bake Element

1. Ensure the product is isolated from the power supply.
2. Remove the product from the joinery, refer to section 8.1.
3. Remove the rear panel to gain access to the element.
4. Remove the 2 ducting sections on left hand side (1 on a single).

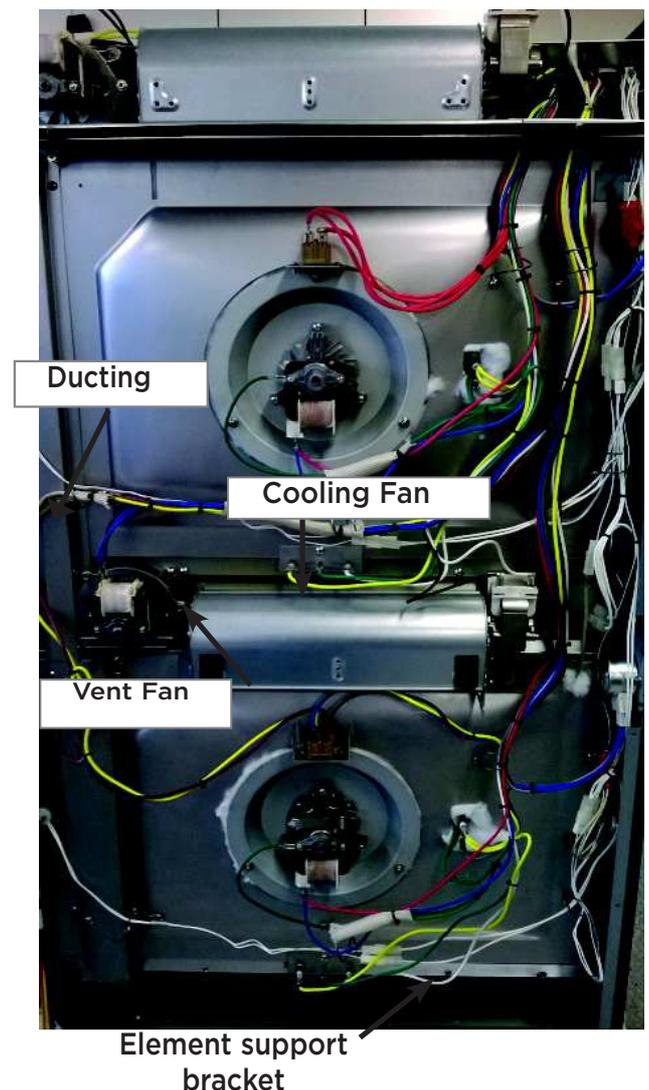
Single models and lower cavity elements:

5. Remove the wiring from the element and remove the screw securing the element to the support bracket.
6. Remove the 2 screws retaining the support bracket to the rear chassis and bend the bracket downwards enough to clear the element.
7. Pull the element out from under the cavity.

Double model upper cavity

8. Remove the wiring to the lower vent fan.
9. Remove the lower vent fan by removing the 2 screws that secure it.
10. Remove the 2 screws retaining the cooling fan cover.
11. Pull the fan cover with the cooling fan attached upward to clear the locating tabs.
12. Allow the fan cover to drop down to clear the element.
13. Remove the element retaining screw.
14. Pull the element out from under the oven cavity.
15. Reassemble in reverse order.

Note: When reinserting the element, use a wide flat blade or similar object, to lift the cavity insulation clear of the replacement element.

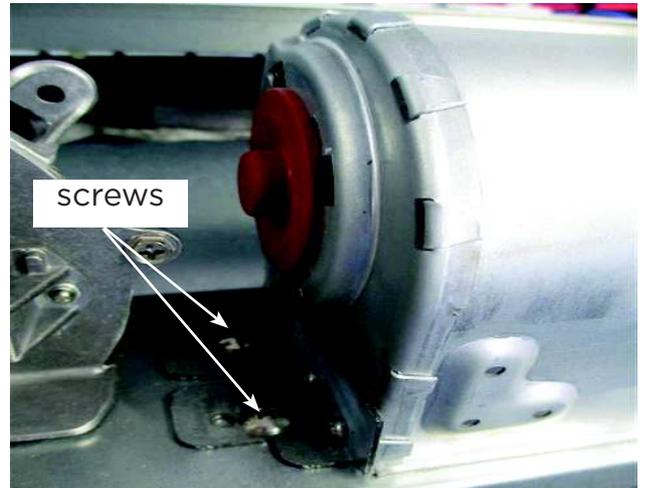


8.17 Removal of the Cooling Fan

1. Ensure the product is isolated from the power supply.
2. Remove the product from the joinery, refer to section 8.1.
3. Remove the rear panel to gain access to the cooling fan(s).

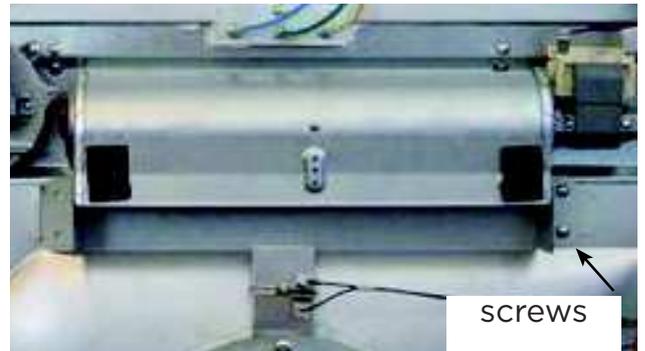
Single models and double upper cavity

4. Remove the wires from the cooling fan motor.
5. Remove the two screws on the cooling fan and slide it out from the locating slot.
6. Remove the four small retaining screws for the cooling fan side brackets and transfer the brackets to the replacement cooling fan.
7. Reassemble in reverse order.



Double model lower cavity

8. Follow instructions 1 to 3.
9. Remove the wiring to the lower cooling fan.
10. Remove the two screws on the right of the cooling fan and slide it out from the locating slot.
11. Remove the four small retaining screws for the cooling fan side brackets, and transfer the brackets to the replacement cooling fan.
12. Reassemble in reverse order.



8.18 Removal of the Vent Fan

1. Ensure the product is isolated from the power supply.
2. Remove the product from the joinery, refer to section 8.1.
3. Remove the rear panel to gain access to the vent fan(s).

Removal

Single model and double upper cavity

2. Remove the vent fan retaining screws.
3. Remove the longest section of vent ducting.
4. Remove the vent fan wires.
5. Lift the vent fan out of the vent ducting and rotate counter-clockwise to clear surrounding parts.
6. Separate the vent fan from the vent tube.



For lower cavity in double ovens

2. Remove the vent fan retaining screw.
3. Remove the lower section of vent ducting.
4. Remove the vent fan wires and transfer them to the replacement fan.
5. Separate the vent fan from the vent tube.

Reassembly

Refit in reverse manner.

8.19 Removal of the Oven Cavity Fan

1. Ensure the product is isolated from the power supply.
2. Remove the product from the joinery, refer to section 8.1.
3. Remove the rear panel to gain access to the cavity fan.

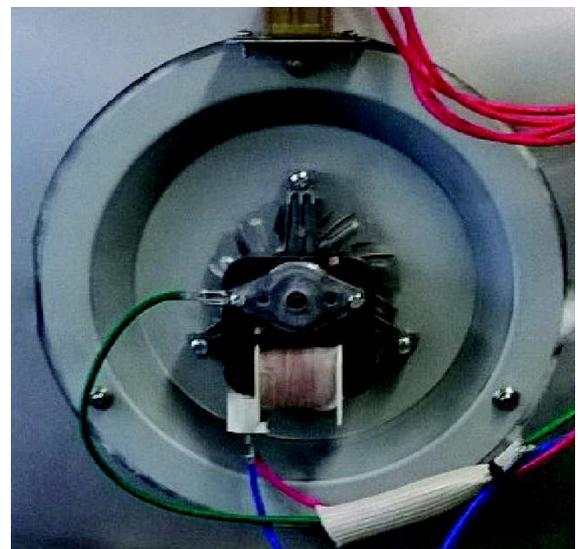
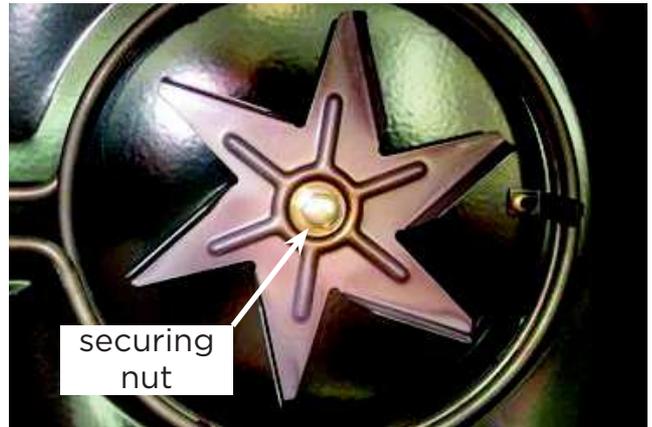
Removal

4. Remove the fan shroud to gain access to the fan blade. (refer 8.9)
5. Turn the fan blade securing nut clockwise to remove. (LH thread).
6. Remove the fan motor wires.
7. Remove the 3 screws securing the fan motor bracket to the panel, and pull out to remove it.
7. Remove the mounting plate from the old fan motor and transfer to the new fan.

Note: To remove the mounting plate use pliers to bend the holding tabs.

Reassembly

Refit in reverse manner.

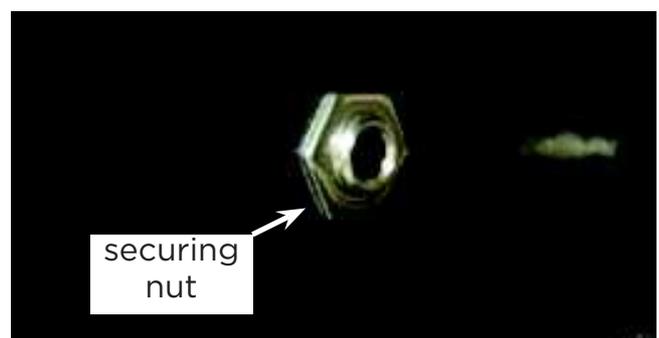
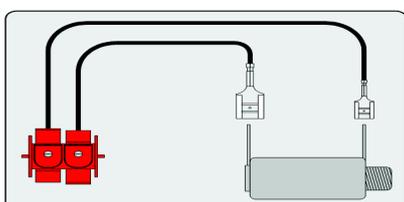


8.20 Removal of the Meat Probe

1. Ensure the product is isolated from the power supply.
2. Remove the product from the joinery, refer to section 8.1.
3. Remove the side access panel adjacent to the meat probe socket.
4. Remove the retaining nut securing the meat probe on the inside of the oven cavity.
5. Remove the meat probe through the inspection hole.
6. Remove the wiring to the meat probe.

Reassembly

Refit in reverse manner.



8.21 Removal of the Oven Door Lock Assembly

The door lock is situated on the left hand side of the product. If the door lock is engaged and the door cannot be opened, refer to the following procedure.

1. Remove the oven from the joinery (refer to Section 8.1)
2. Remove the front door lock inspection panel on the side.
3. Remove the link pin circlip and disconnect the link arm.

Note: Take care not to lose the link pin circlip or pin.

The door lock will now be free to disengage. If the door lock needs to be replaced refer to following procedure:

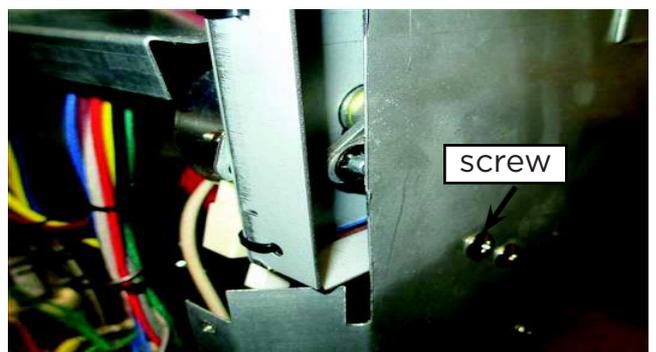
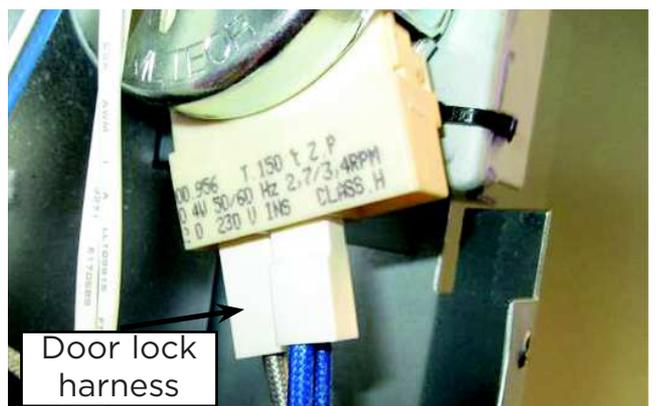
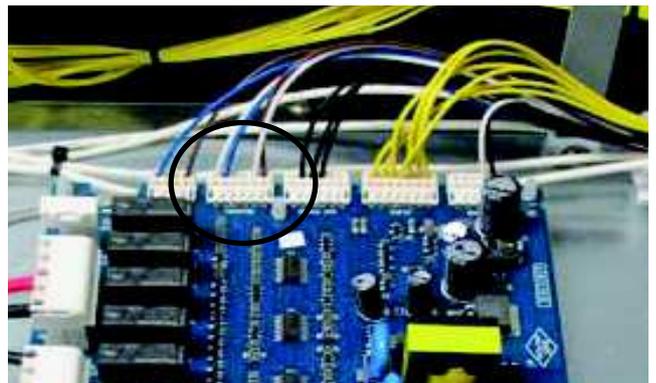
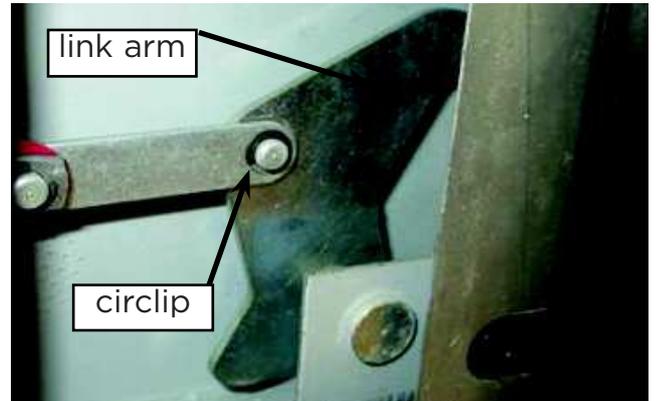
Removal of lock assembly

1. Remove the door switch wiring harnesses from the power module.
2. Remove the wiring harness to the lock motor.
3. Remove the front and rear door lock assembly retaining screws.
4. Remove the wire connector from the door switch. (This is only necessary for the upper door lock on a double oven.)
5. Slide the door lock assembly out the rear of the side panel.

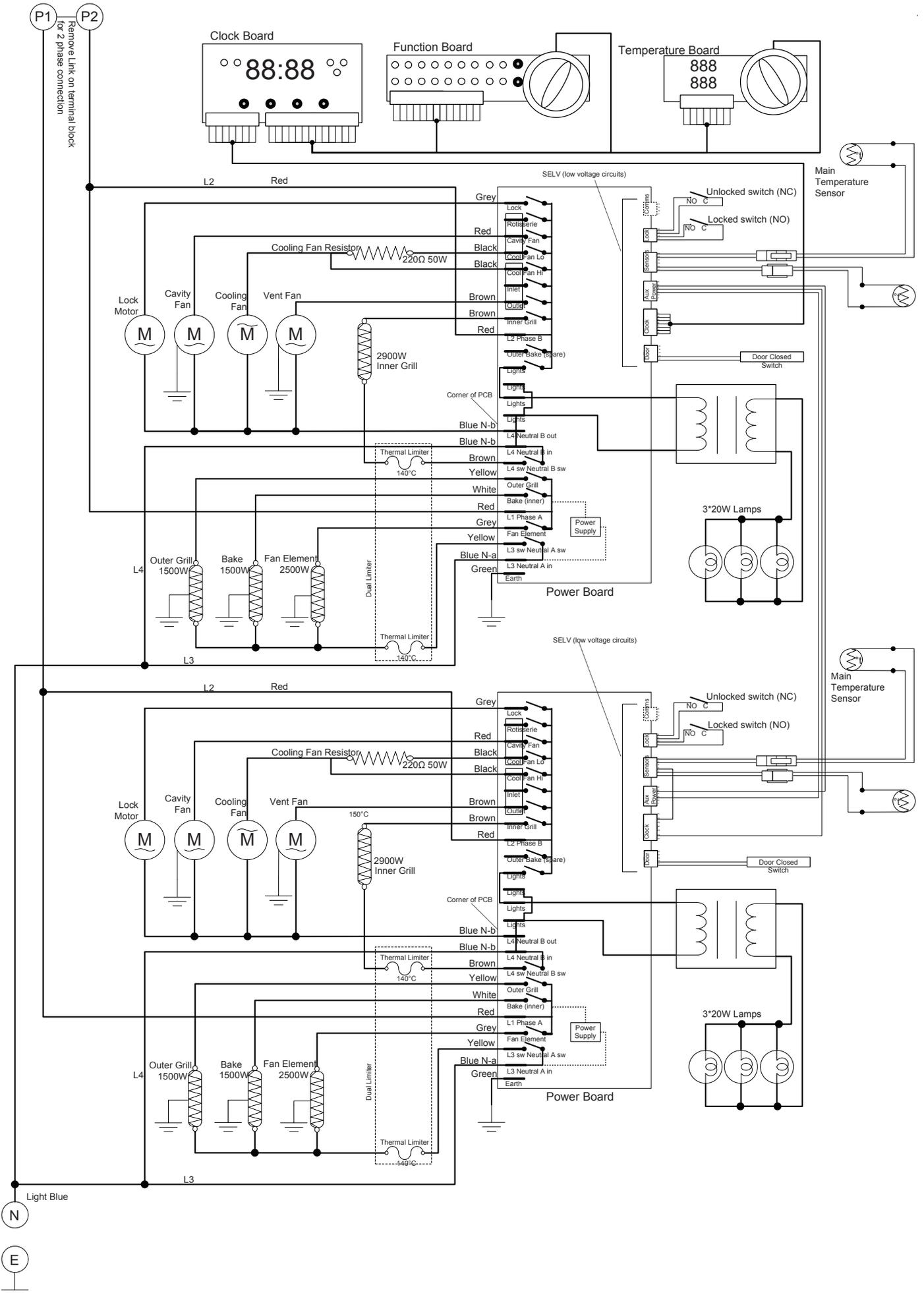
Note: Take care not to lose the door switch spring when removing the door lock assembly.

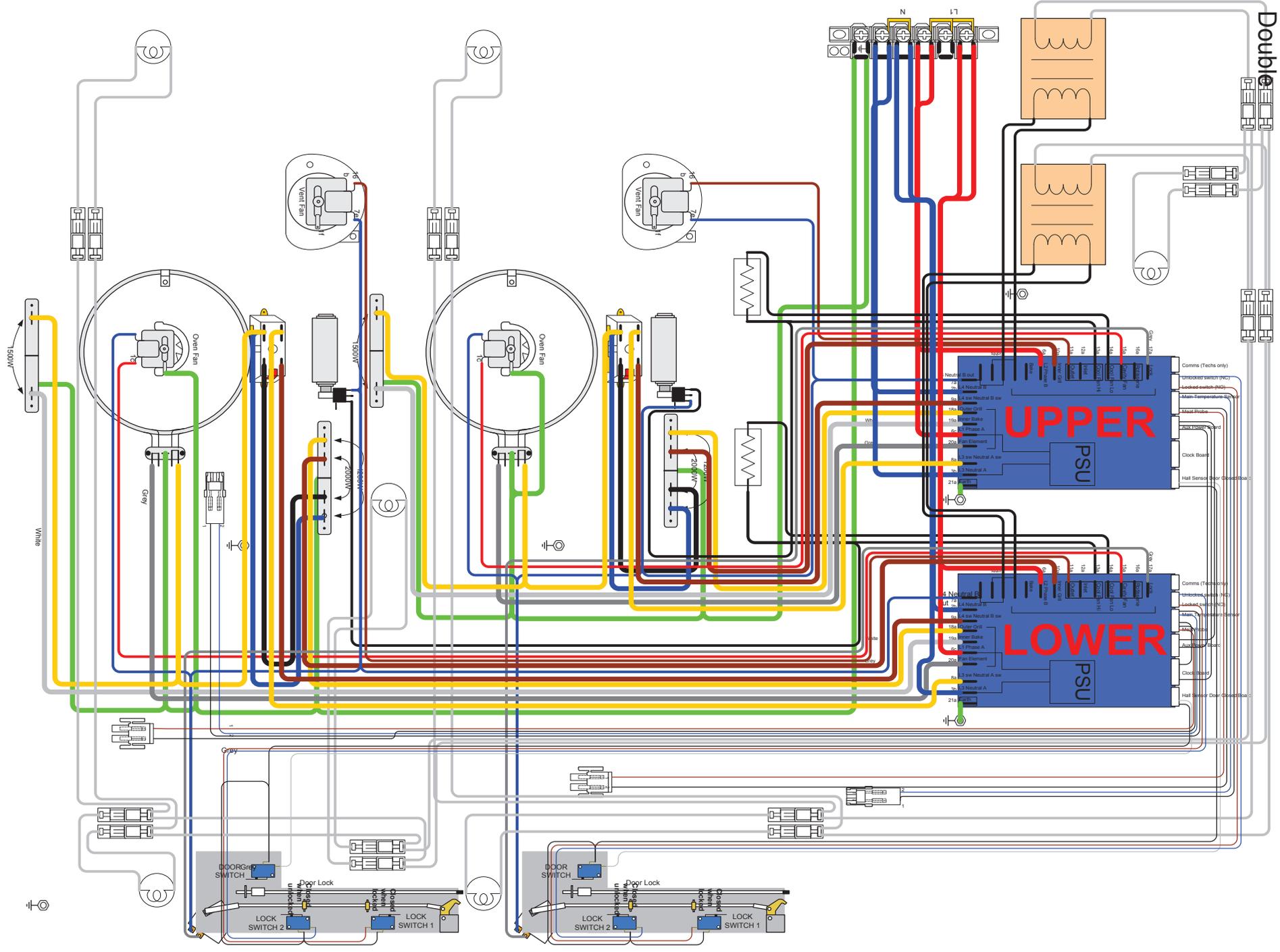
Reassembly

Refit in reverse manner.



9 WIRING DIAGRAM





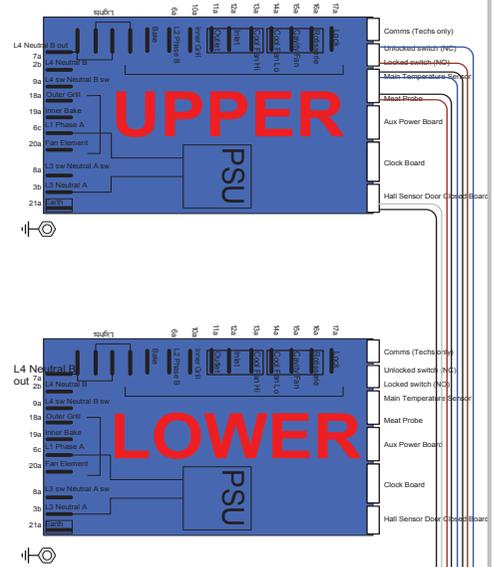
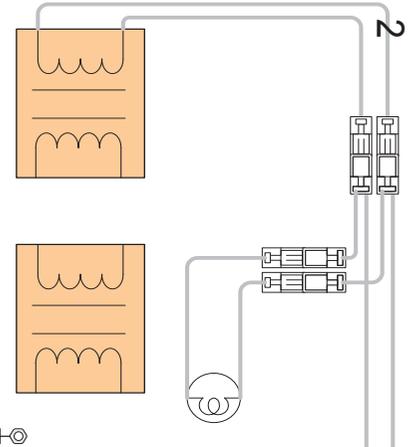
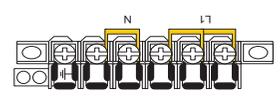
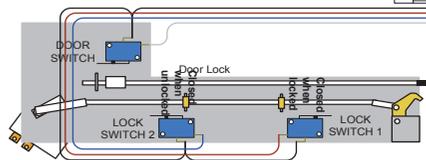
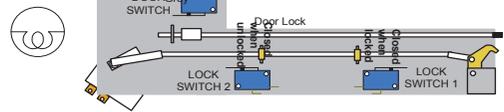
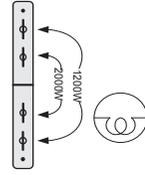
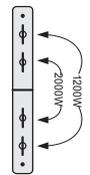
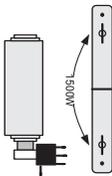
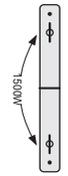
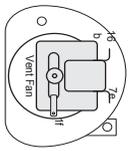
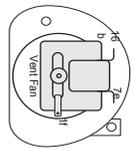
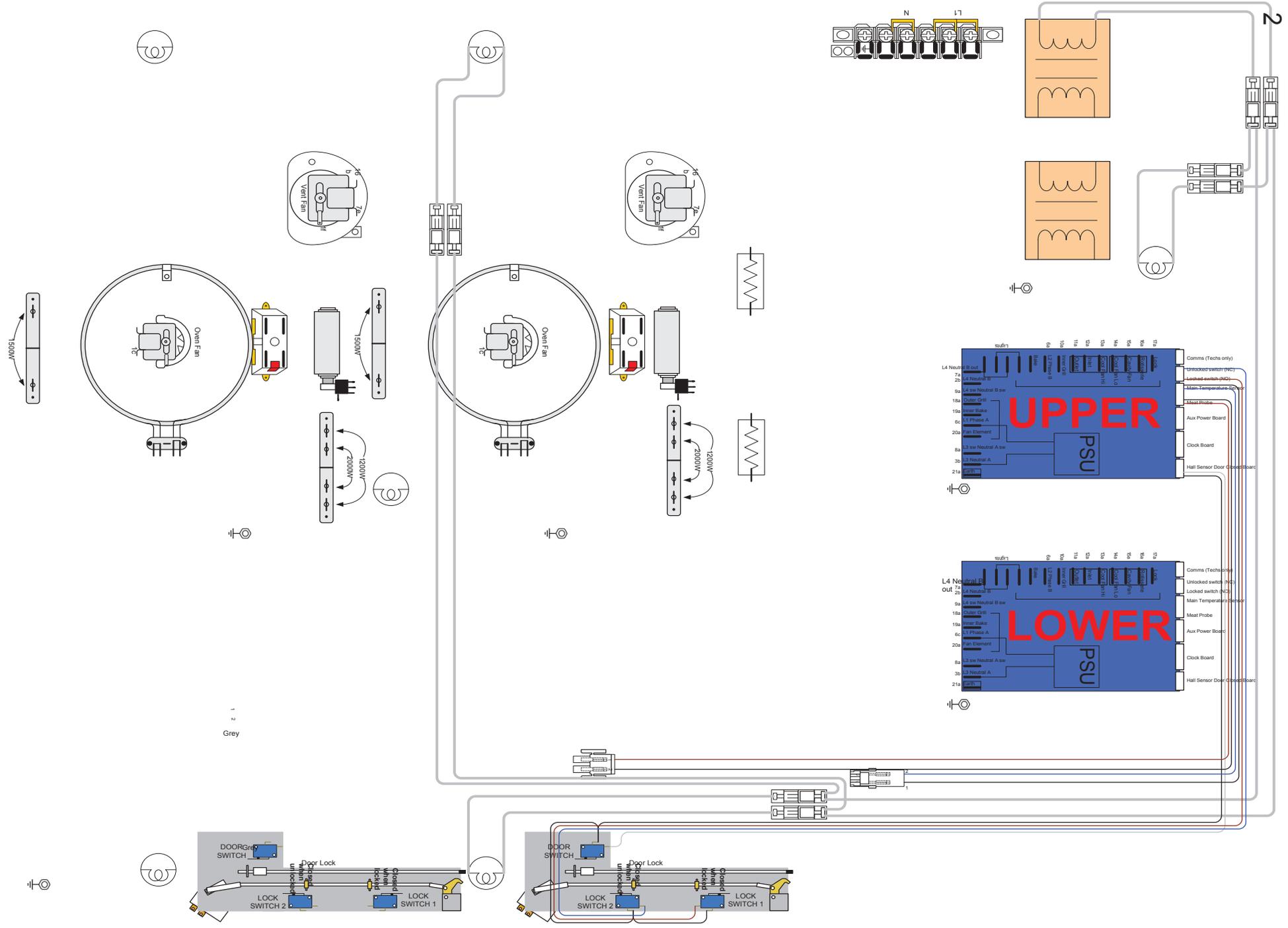
Double

UPPER

LOWER

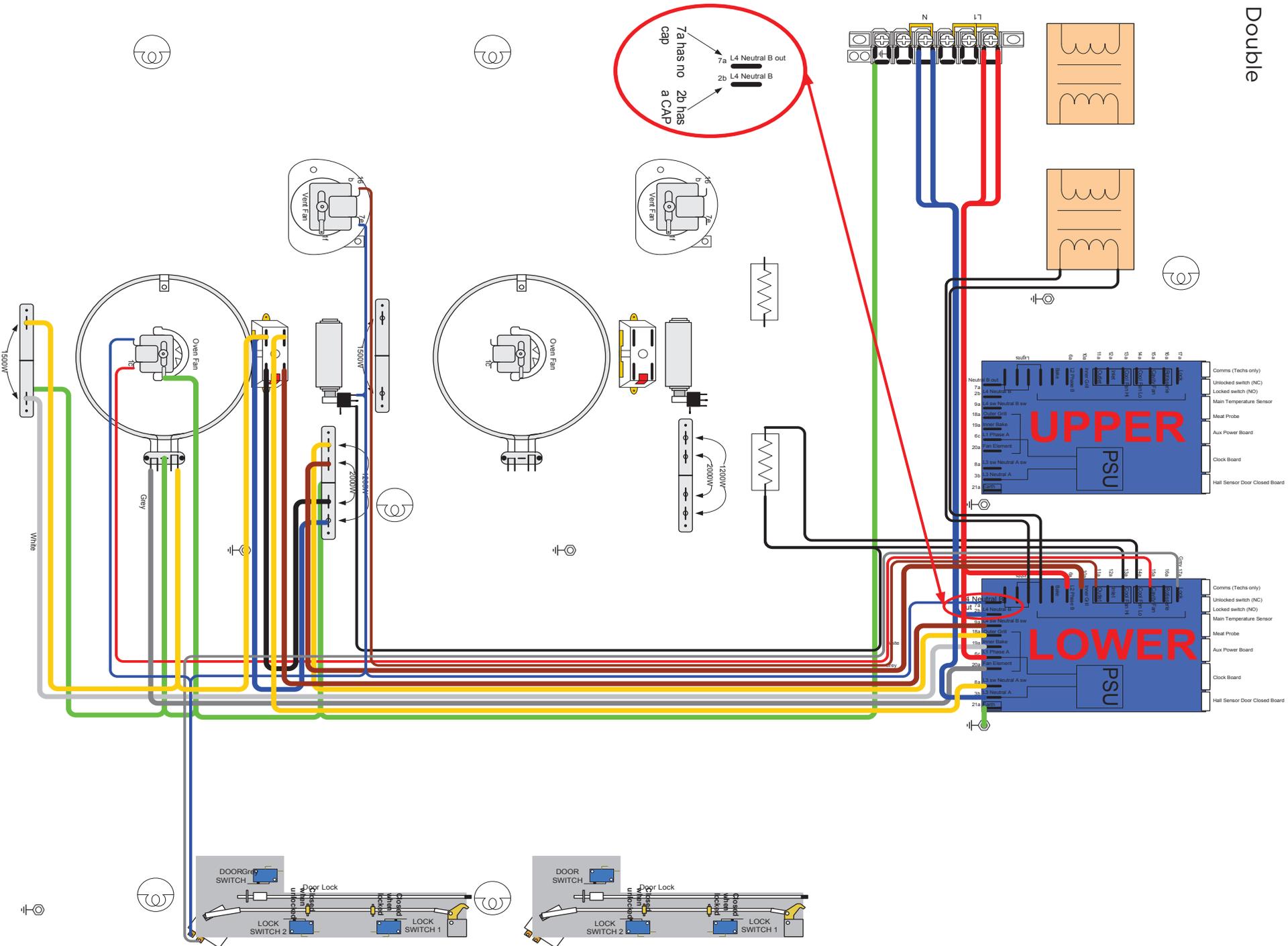
White



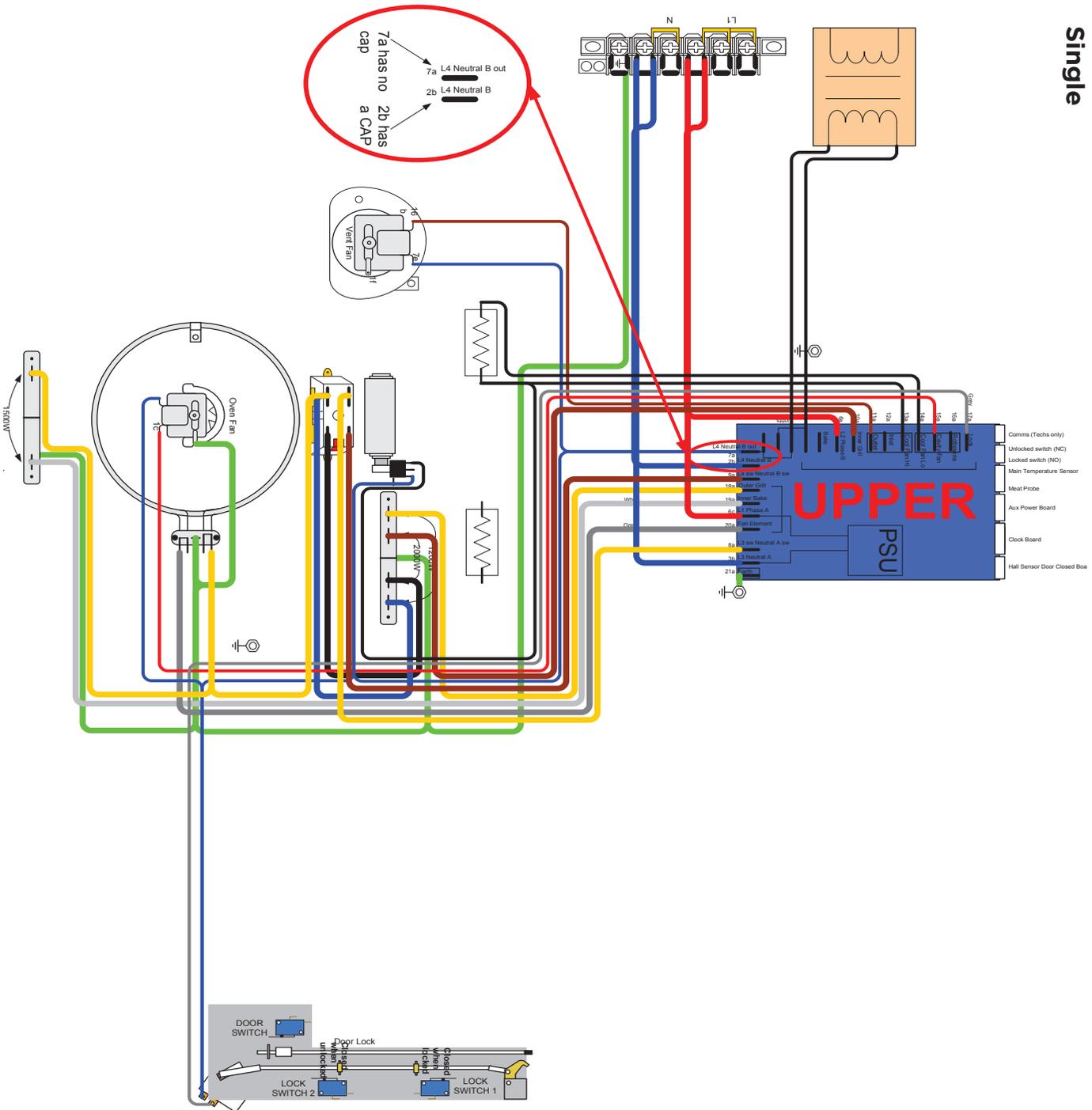


1 2 Grey

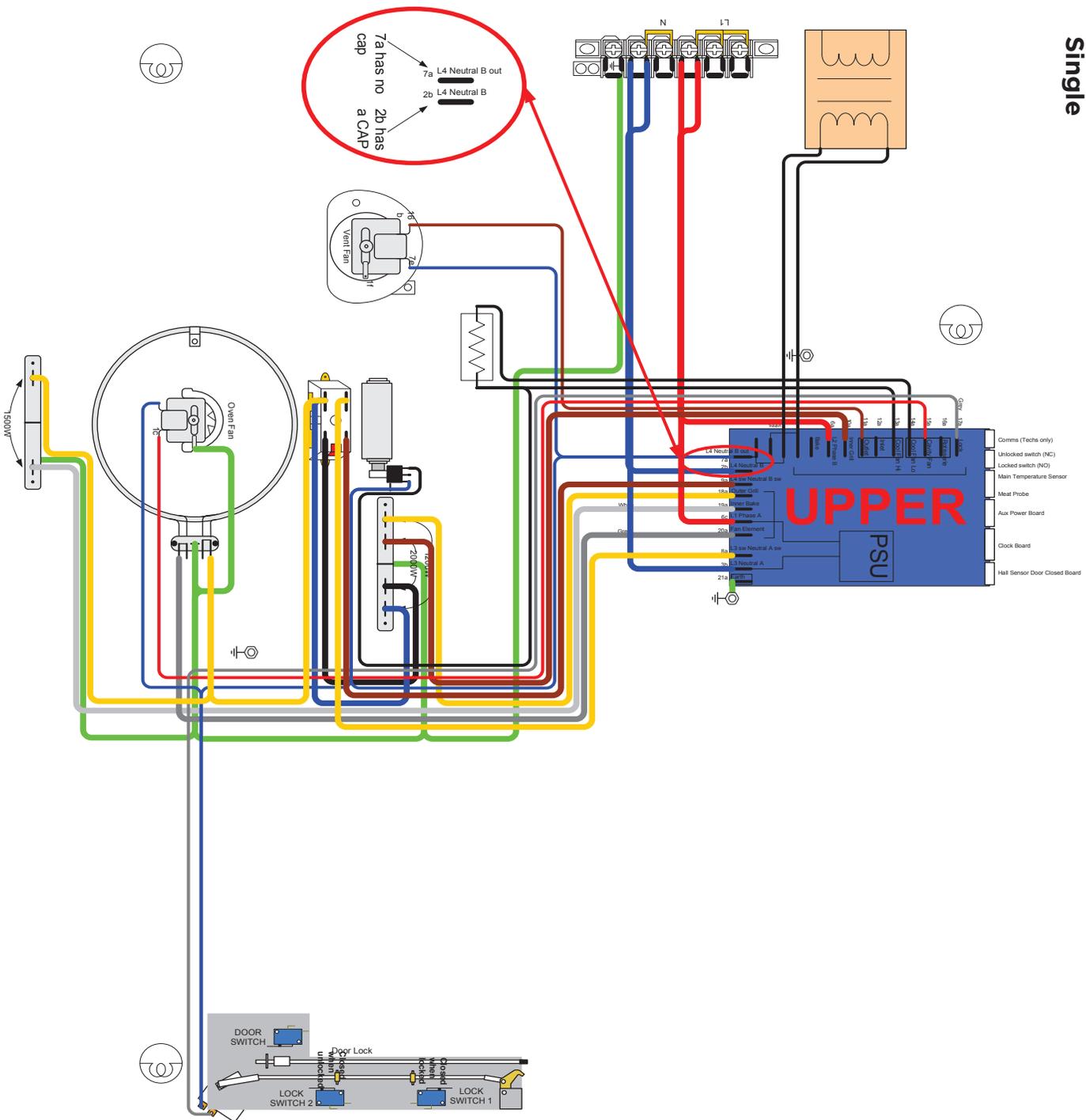
Double



Single



Single



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