FISHER & PAYKEL

RANGE

OR90 GIANT models

SERVICE MANUAL

AA GB

Brand: Fisher & Paykel

Model	Description	Italy CA	Thai CA	Market
OR90SCG1X1	Single oven, classic, dual fuel, series 1, stainless steel	81265	81678	AA
OR90SCI1X1	Single oven, classic, induction, series 1, stainless steel	81266	81679	AA
OR90SCG2X1	Single oven, classic, dual fuel, series 2, stainless steel	81267	81680	AA
OR90SCG4X1	Single oven, cla ssic, dual fuel, series 4, stainless steel	81268	81681	AA
OR90SCG4B1	Single oven, classic, dual fuel, series 4, black	81269	81682	AA
OR90SCG4W1	Single oven, classic, dual fuel, series 4 white	81270	81680	AA
OR90SCI4X1	Single oven, classic, induction, series 4, stainless steel	81271	81684	AA
OR90SCI4B1	Single oven, classic, induction, series 4, black	81272	81685	AA
OR90SCI4W1	Single oven, classic, indiction, series 4, white	81273	81686	AA
OR90SCG6X1	Single oven, classic, dual fuel, series 6 pyrolytic, stain- less steel	81275	81688	AA
OR90SCG6B1	Single oven, classic, dual fuel, series 6 pyrolytic, black	81276	81689	AA
OR90SCG6W1	Single oven, classic, dual fuel, series 6 pyrolytic, white	81277	81690	AA
OR90SCG6R1	Single oven, classic, dual fuel, series 6, pyrolytic, red	81278	81691	AA
OR90CI6X1	OR90CI6X1 Single oven, classic, induction, series 6 pyrolytic, stain- less steel		81693	AA
OR90SCI6B1	Single oven, classic, induction, series 6 pyrolytic, black	81281	81694	AA
OR90SCI6W1	Single oven, classic, induction, series 6 pyrolytic, white	81282	81695	AA
OR90SCI6R1	Single oven, classic, induction series 6 pyrolytic, red,	81283	81696	AA
OR90SDG6X1	Single oven, contemporary, dual fuel, series 6 pyrolytic, stainless steel	81274	81687	AA
OR90SDI6X1	Single oven, contemporary, dual fuel, induction, series 6, white	81279	81692	AA
OR90SCG4B1	Single oven, classic, dual fuel, series 4, black	81285	81697	GB
OR90SDG4X1	Single oven, contemporary, dual fuel, series 4, stainless steel	81576	81723	GB
OR90SCG6B1	Single oven, classic, dual fuel, series 6 pyrolytic, black	81292	81699	GB
OR90SDG6X1 Single oven, contemporary, dual fuel, series 6 pryolytic, stainless steel		81290	81698	GB

FEATURED PRODUCT & CONTACT ADDRESSES

OR90



Fisher & Paykel Appliances Ltd PO Box 58-546, Botany 78 Springs Rd, East Tamaki Manukau 2013 New Zealand

tel: (09) 2730660 fax: (09) 2730580 email: customer.care@fp.co.nz

Fisher & Paykel Appliances Ltd U.K Maidstone Road Kingston Milton Keynes Buckinghamshire England, MK10 0BD

tel: 0845 066 2200 fax: 0845 331 2360 email: customer.care@fisherpaykel.co.uk

Fisher & Paykel Customer Services Pty Ltd PO Box 798, Cleveland, QLD 4163 A.C.N. 003 3335 171 19 Enterprise Street Cleveland, QLD 4163 Australia

tel: (07) 3826 9100 fax: (07) 3826 9164 email: customer.care@fp.com.au

> Fisher & Paykel Appliances Unit D2 North Dublin Corporate Park Swords Co Dublin Ireland

tel: 1800 625 174 fax: 1800 635 012 email: customer.care@fisherpaykel.ie Fisher & Paykel Appliances Ltd Singapore 150 Ubi Avenue 4 Sunlight building #02-00 Singapore 408825

tel:	6547 0100
service tel:	6741 0777
fax:	6547 0123

CONTENTS

1	SERVICE REQUIREMENTS	6
1.1	Health & Safety	6
1.2	Specialised Tools	6
2	DIMENSIONS & SPECIFICATIONS	7
2.1 I	Product Dimensions	7
2.2 (Clearance & Cabinetry Dimensions	8
2.3 I	Electrical Ratings, Connections & Specs	9
3	TECHNICAL OVERVIEW	13
3.1 I	Model Number Description, Product Codes & Service Versions	13
3.2 9	Serial Number	14
3.3	Oven Cavity Fan	15
3.4 (Cooling Fan & Venting System	15
3.5 I	Door Lock	16
3.6 I	Door Switch	16
3.71	Temperature Sensor	17
3.8	OR90 Encoders	18
3.9	Clock Module	18
3.10	Limiters	19
3.11	Power Board	19
3.12	Rotisserie Motor	19
3.13	Grill Element	20
3.14	Bake Element	20
3.15	Fan Element	20
4	OPERATION	21
4.1 -	Setting the Seven seg Clock	21
4.2 -	Using the Timer	22
4.3 -	Automatic Cooking & User Perference	23
4.4 -	Setting the TFT Clock	28
4.5-	Sertting the TFT Timer	29
4.6	Automatic Cooking	31
4.7	User Preferences TFT	34
4.8 9	Sabbath Mode	36
4.91	Remove the oven door	40
4.10	Replace the oven door	41
4.11	Inserting the shelves	42
4.12	Attaching the kickstrip	43

CONTENTS

5 DIAGNOSTICS	44
5.1 Entering the Technician Mode	45
5.2 Technician Mode Navigation	46
6 FAULT DIAGNOSTICS	54
6.1 User Alert Codes	55
6.2 Failure Alerts	56
6.3 SYMPTOM:Oven under cooking	59
6.4 SYMPTOM:Baking Burns on the top	59
6.5 SYMPTOM:Baking burns on the bottom	60
6.6 SYMPTOM:Oven seems to be functioning normally but does not heat	60
6.7 SYMPTOM:Oven heats slowly or fails to reach preset temperature	60
6.8 SYMPTOM: No clock display but oven works	60
7 SERVICING PROCEDURES	61
7.0 Removing the door hinge	61
7.1 Removing the inner glass	62
7.2 Removing the handle and outer door glass	63
7.3 Removing the Fan Shroud	63
7.4 Removing the Fan Element	63
7.5 Removing the Grill Element	64
7.6 Removing the Bake Element	64
7.7 Removing the Cavity Fan	65
7.8 Removing the Cooling Fan	66
7.9 Removing the Door switch	67
7.10 Removing the Function and Temerature encoders	67
7.11 Removing the TFT clock	68
7.12 Removing the 7 Seg clock	69
7.13 Removing the Power board	70
7.14 Removing the Temperature sensor	70
7.15 Removing the Induction Hob	71
7.16 Removing the Gas Hob	71
8 WIRING DIAGRAMS	72
8.1 OR90 PYRP Wiring Diagram	72
8.2 OR90 MULTIEWiring Diagram	73

6

1

SERVICE REQUIREMENTS

1.1 Health & Safety

Note: When servicing the range, 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 wall oven. If the supply is required to be on to service the range, make sure it is turned off when removing any electrical component or connection to avoid electrical 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 oven and work after service is completed.

1.1.4 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.

1.1.5 Sheet Metal Edges



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

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 DIMENSIONS & SPECIFICATIONS

2.1 Product Dimensions Induction & Dual Fuel









	OR90SCI MODELS
PRODUCT DIMENSIONS	mm
Overall height of range (from floor to top of cooktop, excluding optional backguard)	min 898 max 946
Overall width of range	897
 Overall depth of range (from front of range to rear of island trim/backguard, excluding handles and dials) 	600
 Height of optional backguard from top of cooktop (supplied with some models only) 	60
E Height of chassis (excluding adjustable feet)	813
(F) Adjustable feet height	min 85 max 133
⑥ Depth of open door to front of range	451

2.2 Clearance Dimentions Induction





	OR90SCI MODELS
CLEARANCE DIMENSIONS	mm
(A) Minimum vertical distance between benchtop and cabinet extending above counter	450
(B) Minimum clearance from left and right edge of cooker to nearest vertical combustible su	irface 50
 Minimum clearance from cooking surface to: Overhead cabinet centered above the cooktop Ventilation hood centered above the cooktop 	650 650
Width of cabinetry opening	900
(E) Maximum height of cabinetry immediately adjacent to the range (from floor to counterto	op)* 946
(F) Maximum depth from wall to cabinetry face	600
* Depending on the height of the feet adjustment. The cooking surface must sit flush or above benchtop level.	

в

- Note The cabinetry surrounding the range must be heat resistant and capable of withstanding temperatures of 75°C above room temperature. Do not install the range near flammable
- в materials such as curtains.
- в Installing the range on a plinth: the range can be installed on a plinth without the adjustable feet fitted. Ensure the range is secure and provide
- в safety measures to keep it in place. Cabinetry dimensions can be adjusted в
- to suit the plinth height, see product dimensions for chassis height. 8
- The range must sit flush or above benchtop level.

2.3 Clearance Dimentions Dual Fuel





		OR90 DUAL FUEL
CL	EARANCE DIMENSIONS	mm
\bigcirc	Minimum vertical distance between benchtop and cabinet extending above counter	450
в	Minimum clearance from left and right edge of cooker to nearest vertical combustible surface*	200
C	Minimum clearance from cooking surface to: - Overhead cabinet centered above the cooktop (combustible/unprotected)* - Overhead cabinet centered above the cooktop (non-combustible/protected)* - Ventilation hood centered above the cooking surface	650 450 750
D	Width of cabinetry opening	900
E	Maximum height of cabinetry immediately adjacent to the range (from floor to countertop)**	946
F	Maximum depth from wall to cabinetry face	946
	Installation clearances and protection of combustible surfaces shall comply with the current local regulations eg. AS/NZ Gas installations code. The standards above specify that where required protection shall ensure that the surface tempera surface does not exceed 65°C above room temperature.	ZS5601.1 (latest edition) ture of the combustible
	** Depending on the height of the feet adjustment. The cooking surface must sit flush or above countertop level.	

Note

Overhead Clearances In no case shall the clearances between the highest part of the cooker be less than 650mm or for an overhead exhaust fan 750 mm. All other downward facing combustible surfaces less than 650 mm above the cooker surface shall be protected for the full width of the cooking surface in accordance with the standards noted above. In no case shall the clearance be less than 450 mm.

Rear and Side Clearances Where the dimensions from the periphery of the nearest burner to any vertical combustible surface is less than 200 mm the surface shall be protected in accordance with the standards to a height of not less than 150 mm above the cooking surface for the full width or depth of the cooking surface.

- Where the dimensions from the periphery of the nearest burner to any horizontal combustible surface is less • than 200 mm, the horizontal surface shall be greater than 10 mm below the surface of the hob, or the horizontal surface requirement above.
- Do not install the range near flammable materials such as curtains. Installing the range on a plinth •
- The range can be installed on a plinth without the adjustable feet fitted. Ensure the range is secure and provide
- safety measures to keep it in place.
- Cabinetry dimensions can be adjusted to suit the plinth height, see product dimensions for chassis height. .

2.3 Electrical Ratings Induction

MODEL CODE	MAX POWER (W)	HZ	VOLTAGE (V)	AMPS (A)
OR90S*1	10610	50 Hz	220 - 240 V~	46.13
OR90S*4	15300	50 Hz	220 - 240 V~	66.54
OR90S*6	15550	50 Hz	220 - 240 V~	67.6



Electrical connection Induction



① Remove the screws that hold the cover in place at the back of the range



② Unscrew the bottom terminal end of the strain relief by using two spanners. Insert terminal into the power suply cable, then insert the feeder cable into the strain relief (ensure sealing ring stays secured inside the strain relief).

IMPORTANT!

The earth conductor should remain around 30mm longer than the others



③ Connect the live, neutral and earth cables to the terminal as shown above. Lock the power supply cable in place by screwing the terminal end back to the strain relief. Re-mount the screw cover back onto to the range.

Electrical Rating Dual Fuel

Replacing the power cord

- Replacements should only be made by a qualified electrician. •
- . Use a cable according to the applicable local regulations.

MODEL CODE	MAX POWER (W)	HZ	VOLTAGE (V)	AMPS (A)
OR90SCG1	3210	50 Hz	220 - 240 V~	13.95
OR90SCG2	4950	50 Hz	220 - 240 V~	21.54
OR90SCG4	4950	50 Hz	220 - 240 V~	21.54
OR90SCG6	5200	50 Hz	220 - 240 V~	22.60
OR90SDG6	5200	50 Hz	220 - 240 V~	22.60



Electrical connection Dual Fuel

IMPORTANT!

The power supply cable must be connected by an authorised service person DO NOT unscrew the screws fixing the cover plate behind the terminal block .



220-240V AC - 1 2 3 4 5 N PF æ

OR90SG6 MODELS ONLY

Unscrew the screw to open the cable clamp.
 For OR90SCG6 and OR90SDG6 models, connect the U bolts onto the terminal.



③ Connect the phase, neutral and earth wires to the terminal board as shown. Strain the feeder cable and block it with cable clamp. Screw clamp shut before closing the main cover

Unhook the terminal board cover by inserting a

screwdriver into the two hooks at the base of the block.

Feeder cable section Use a type of cable according to the applicable local regulations.

MODEL CODE	CABLE SPECIFICATIONS
OR90SCG1	220-240 V 50Hz 3210 W (13.95 A) 3 x 1,5 mm ² **
OR90SCG2	220-240 V 50Hz 4950 W (21.54 A) 3 x 2,5 mm ² *
OR90SCG4	220-240 V 50Hz 4950 W (21.54 A) 3 x 2,5 mm2 *
OR90SCG6	220-240 V 50Hz 5200 W (22.60 A) 3 x 2,5 mm ² *
OR90SDG6	220-240 V 50Hz 5200 W (22.60 A) 3 x 2,5 mm ² *

* Connection with wall box connection.

** Connection possible with plug and outlet or with wall box connection.

Gas supply

- The connection must be performed by an authorised person according to the relevant standards.
- This appliance is suitable for use with Natural Gas or ULPG. The gas range
 is shipped from the factory set and adjusted for Natural Gas. It can be converted for use with ULPG following the instructions in this manual.
- The connection must be made at the rear of appliance. Ensure the pipe does not cross the cooker.
- The inlet not used must be closed off with the cap and sealing gasket supplied.

Installation with a flexible hose assembly

- If this appliance has to be installed with a hose assembly, the installer shall refer to the
- network operator or gas supplier for confirmation of the gas type, if in doubt.
 When used with a flexible hose, the connector on the wall should be between 450mm to 500mm from the floor and 200 mm to 300 mm from the left-hand side of the appliance as viewed from the front. The hose connection on the appliance shall face downwards.
- It is important that the hose does not come in contact with the metal of the appliance and is secured as per appropriate gas installation codes. A chain 80% of the length of the flexible gas hose must be used to prevent stress being applied to the hose. The chain should be attached securely to the product where shown, and on the wall.
- Flexible hose assemblies should be AS/NZS 1869 Class B or Class D certified. The thread connection shall be Rp $\frac{1}{2}$ " (ISO 7-1) male.
- The hose assembly shall be as short as practicable and comply with relevant AS5601 / NZS5261 requirements.

IMPORTANT!

 After connection the installer must check that the hose is not kinked, subjected to abrasion or permanently deformed. The installer must check also that the hose is not near (or in contact) with any hot surfaces.

Gas connection specification



IMPORTANT!

Check the correct positioning of the gas regulator. The arrow on the back of the gas regulator must be oriented toward the connector.

Electrical Specs

Italy CA	Thai CA	Model	Series	Volts	Freq	Amp Draw
81265	81678	OR90SCG1X1	1	220/240V	50Hz	14A
81266	81679	OR90SCI1X1	1	220/240V	50Hz	46A
81267	81680	OR90SCG2X1	2	220/240V	50Hz	22A
81268	81681	OR90SCG4X1	4	220/240V	50Hz	22A
81269	81682	OR90SCG4B1	4	220/240V	50Hz	22A
81270	81683	OR90SCG4W1	4	220/240V	50Hz	22A
81271	81684	OR90SCI4X1	4	220/240V	50Hz	67A
81272	81685	OR90SCI4B1	4	220/240V	50Hz	67A
81273	81686	OR90SCI4W1	4	220/240V	50Hz	67A
81275	81688	OR90SCG6X1	6	220/240V	50Hz	23A
81276	81689	OR90SCG6B1	6	220/240V	50Hz	23A
81277	81690	OR90SCG6W1	6	220/240V	50Hz	23A
81278	81691	OR90SCG6R1	6	220/240V	50Hz	23A
81280	81693	OR90CI6X1	6	220/240V	50Hz	68A
81281	81694	OR90SCI6B1	6	220/240V	50Hz	68A
81282	81695	OR90SCI6W1	6	220/240V	50Hz	68A
81283	81696	OR90SCI6R1	6	220/240V	50Hz	68A
81274	81687	OR90SDG6X1	6	220/240V	50Hz	23A
81279	81692	OR90SDI6X1	6	220/240V	50Hz	68A
81285	81697	OR90SCG4B1-GB	4	220/240V	50Hz	22A
81576	81723	OR90SDG4X1-GB	4	220/240V	50Hz	22A
81292	81699	OR90SCG6B1-GB	6	220/240V	50Hz	23A
81290	81698	OR90SDG6X1-GB	6	220/240V	50Hz	23A

13 **3 TECHNICAL OVERVIEW**

3.1 Model Number Description, Product Codes & Service Versions

E.g. OR90

Туре	OR = Range
Width	90 = 90cm
Cavity	S = Single Cavity
Family	C = Classic D = Contemporary
Features	G = Gas I = Induction
Series	1 = Entry Level 2 = Mid spec Multifunction 4 = Mid spec Multifunction 6 = Pyrolytic
Colour	W = White B = Black X = Stainless Steel R = Red
Series	1 = 1st Iteration

The product code is a dedicated number used to identify model variations e.g. different colour, market etc.

e.g. :80831 - A is a single stainless steel, AA product. The -A relates to the service version of the product.

The Service version is used to signify that some new components or features are not retro-fitable to earlier product versions.

e.g. 81266-B uses a number of different parts (which are contained in a separate parts manual) to 81266-A, so is important to only order parts for the correct product code with correct service version.

3.2 Serial Number

The serial number consists of eight digits and contains the following information:

Example:



In the example above, the appliance was manufactured in the WEEK 28 in 2017

The serial plate is located on the lower left hand front of the chassis, and can be viewed when the door is in the open position.

	PO Box 798 (Cleveland, QLD 4163, Australia	5.1179
Model No.: OR90SCG4W1	SAP NR. C9GDFF	2008W SER.INA. 7202	EL Approval No
Part Nº Gas Approval	a manana	SERIES.	ELAppiovarino
Gas Type Test point pressure(kPa)	NZ Inlet Pressure(kPa)	Total Gas Consumption	
Natural Gas 1.00	1.00(Min) - 1.13(Nom) 1.50(Max) - 5.0(Over)	58 MJ/h Natural Gas	
ULPG 275	2.25(Min) - 2.75(Nom) 3.25(Max) - 14.0(Over)	57.60 MJ/h ULPG	
Power Supply 220-240/380-415 V 50 Hz	5210 W	Made in Italy	

3.3 Oven Cavity Fans

The oven cavity fans turn on as soon as the mode is selected. One turns to the left and the other turns to the right.

The fans should always operate when the fan element is on.

Voltage: 230V Wattage: 30 watts





3.4 Cooling Fan & Venting

The cooling fan specifications

Voltage:	220 240 V
Frequency:	50 / 60 HZ
Wattage:	43 watt



The venting system allows a small amount of air to flow through the cavity from an inlet at the left rear, to an outlet in the top. The outlet air is ducted to the cooling fan and then expelled.

3.5 Door Lock

The micro switches are activated by a cam, which tells the PCB when the door is 'unlocked' or 'locked'.

The board needs to see a 'locked' signal for the pyro cycle to work and an 'unlocked' signal for the cooking functions to work. The stoppers are used to stall the motor to force it to change direction.

The start-up direction of the motor is random so if it starts in the wrong direction the stoppers are used to reverse it to go the right way.

Voltage:220-240 V / 50 HzResistance:100 M OhmsWattage:4 wattsMax operating temp : 120 deg C





3.6 Door Switch

The door switch is a micro switch which is operated when the door is opened & closed.



3.7 Temperature Sensor

OR90

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

Degrees °C	Degrees °F	Resistance Ω
0	32	1000
1	33.8	1004
2	35.6	1008
3	37.4	1011
4	39.2	1015
5	41	1019
6	42.8	1023
7	44.6	1027
8	46.4	1030
9	48.2	1034
10	50	1038
11	51.8	1042
12	53.6	1046
13	55.4	1049
14	57.2	1053
15	59	1057
16	60.8	1061
17	62.6	1065
18	64.4	1068
19	66.2	1072
20	68	1076
21	69.8	1080
22	71.6	1084
23	73.4	1087
24	75.2	1091
25	77	1095
26	78.8	1099
27	80.6	1102
28	82.4	1106
29	84.2	1110
30	86	1114
1		



3.8 OR90 Encoders

The function encoders are used to select the oven functions and temperatures. Functions on the right and temps on the left. (From the front)



3.9 OR90 Clock Module

This module shows the time, and allows the user to select automatic cooking and a cook timer. There are two different clocks, TFT and 7 segment.



3.10 Limiters

All models have a fan run on limiter which is set to 120 deg C.

This limiter will keep the cooling fan running until the cavity temperature drops below 120 deg C.

The over temp limiter is one shot type, the trip temperature is 120 deg C + / - 6.5degC.

Max voltage 250V, max current 16A.

3.11 Power Board

The power board is located on the back panel area, and is held in place by clips.

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

- Elements
- Door switch
- Temperature sensor.
- Door lock (pyro model only)
- Lights
- Rotisserie motor
- Cavity fan
- Cooling fan

The power board is a GOEP type board so is used in both the pyrolytic model and multifunction model. This means if being changed for any reason, the model ID must be selected for the product it is being fitted to.

Refer to section 6 for more detail.

3.12 Rotisserie Motor

The rotisserie motor is situated in the back of the product and is selected via the clock module.

Can be used on any function, but Fan Grill is recommended.

Voltage: 220 - 240 VAC Wattage: 4 watts Output RPM: 2 -2.4

Refer to user guide on operation.







3.13 Grill Element

All models have a grill element with an inner and outer elements

- Inner element 3000 Watts
- Outer element 1300 Watts



3.14 Bake Element

All models have a bake element

• Bake element 1800 Watts



3.15 Fan Element

All models have a fan elementFan element 1300 Watts X 2 elments



21 4 OPERATION

4.1 OR90 - Setting the seven seg Clock



(1) Press \blacksquare to enter the clock display.



② Press \vee and \wedge to set the time.

4.2 OR90 - Using the Timer

- You can use the timer at any time, even if you are not using the oven.
- The time counts down in minutes (hours:min) until the last 5 minutes of cooking, when it will countdown in seconds (min:sec).
- You can set the timer for up to 23 hours and 59 minutes.

IMPORTANT! The timer does NOT turn the oven off.

To set the timer



• The clock will show □·□□ and the timer indicator ♀ will flash.



- ② Press \lor and \land to set the time.
- The timer is now set and will begin counting down.
- To check the time remaining press X.

To cancel the timer



- Press ∑ .
- ② Press ∨ until the time is reset to
 □.□□

When the set time is up

- The display will flash and a tone will sound.
- Press \underline{X} to stop the tone sounding.

4.3 Automatic Cooking

- Turn off the oven automatically after a set period of time.
- Set the oven for food to be ready at a specific time.

Before you start

• Make sure that your oven is displaying the correct time of day and food is in the oven.

IMPORTANT!

Safe food handling: leave food in the oven for as short as time as possible before and after cooking or defrosting. This is to avoid contamination by organisms which may cause food poisoning. Take particular care during warmer weather.

To set Auto Cook

If you have started cooking and want to set the oven to turn off automatically after a set period of time:



- (1) Press $\stackrel{\texttt{III}}{\frown}$ to set the cook time.
- The clock will show **D**.**DD** and AUTO will flash in the display.



Press ∨ and ∧ to adjust the cook time.



If you have not already set a function and temperature:

Set the function and temperature now using the oven dials. Auto Cook is now set and will begin counting down.

- The display will revert back to the time of day and AUTO will be solidly lit.
- The oven will continue to cook until the set time is up, then it will automatically turn off.

Automatic Cooking

If you want to set the oven to turn on later and be ready at a set time:



- (1) Press $\stackrel{\texttt{M}}{\rightharpoonup}$ to set the cook time.
- The clock will show 0.00 and AUTO will flash in the display.



- (1) Press 0 to set the end time.
- The clock will show the earliest possible end time and AUTO will flash in the display.



If you have not already set a function and temperature:

③ Set the function and temperature now using the oven dials



② Press ∨ and ∧ to adjust the cook time.



(1) Press \lor and \land to adjust the end time.

Auto Cook is now set and will begin counting down.

- The display will revert back to the time of day and AUTO will be solidly lit.
- The oven will continue to cook until the set time is up, then it will automatically turn off.

Automatic Cooking

When Auto Cook is set

- You can modify the function and temperature at any point before the oven has automatically turned on or during cooking.
- To check or edit the cook time or end time press $\stackrel{{}_{\scriptstyle \longrightarrow}}{\longrightarrow}$ or $\textcircled{}_{\scriptstyle \longrightarrow}$ and adjust as needed.

IMPORTANT!

- During Auto Cook the grill element will come on while the oven is heating up. Food placed into a cold oven could be prone to burning as the oven heats up.
- Large items and foods with a high fat or sugar content are especially prone to burning. Take particular care with foods such as macaroni cheese, large poultry, and enchiladas.
- Ideal foods for automatic cooking include stews, casseroles, braised meat and potato top pie.
- Position food on a lower shelf to prevent burning.
- Where possible cook food in a pan with a lid, or cover food with foil.

When the set time is up



- ① The oven lights will go out and the oven will stop heating.
- ② AUTO will flash in the display and a tone will sound.
- ③ Press any button to stop the tone sounding.
- ④ Turn both the oven dials back to 0 (OFF).

To cancel Auto Cook



 Press at any time to cancel Auto Cook and return the oven to manual cooking.

User Preferences

Adjust the user settings to suit your personal setup preferences.

You can set your oven to:

- 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)
- connect to the wireless network in your house (if available - some models only. Visit fisherpaykel.com/connect for more details).

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

How to change preference settings



- (1) Press and hold \equiv until there is a beep
- The display will show 24 hr
- The display will flash while in edit mode.



③ Press ∨ or ∧ to scroll through the options for that particular setting.



② Press ≡ to scroll through to the setting you want to change.



- ④ Press ✓ to save the new option and exit user preference mode.
- The display will stop flashing.
- Press × to exit user preference mode without changing the setting.

User Preference settings

27

SETTING	DEFAULT OPTION	ALTERNATIVE OPTION(S)		
CLOCK DISPLAY	24 HR	12 HR	DISPLAY OFF **	
Select between: - Analog and digital display - 12-hr and 24-hr display - Display off** Turn the display off if you only want to use the basic functionalities of your oven.	2446	154-	oFF	
TEMPERATURE SCALE	CELSIUS	FAHRENHEIT		
Select between degrees Celsius or Fahrenheit.		op		
AUDIO FEEDBACK	BEEPS/TONES ON	BEEPS/TONES OFF		
Turn the oven beeps and tones on or off.*	bPon	6PoF		
OVEN LIGHTS	LIGHTS ON DURING COOKING	LIGHTS OFF DURING COOKING		
Have the light off during cooking if you want to save power or want the food you cook to be a surprise for others.	Lton			
SABBATH MODE	SABBATH OFF	See 'Sabbath Mode' for instructions.		
	SboF			
WIRELESS CONNECTION If available Some models only	OFF OFF	ON RE	ESET ESET	
Enable wireless connection (required for remote mode).		Visit fisherpaykel.com/connect and follow the instructions to enable this setting.		

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

** With this option saved, you can still use the oven, and timer, however the display will remain unlit.

Any automatic functions will be cancelled when this option is selected.

To quit this option and enable the display, press and hold imes .

4.4 OR90 - Setting the TFT Clock

Setting the clock

When your oven is first turned on, or after a power cut, the display will flash. You will need to set the clock in order to use the oven.



- Scroll to choose your preferred clock display. Select between:
 - Analog
 - 24-hr digital
 - 12-hr digital
 - Display off**
- ② Press \checkmark to confirm.



②Alf you have set analog or 12-hr digital display:

Set Time of day

12:00pm

hours

с О

CANCEL

- Scroll to select am or pm.
- Press ✓ to confirm.

Set Time of day

12:00pm

④ Scroll to set the hours

• Press ✓ to confirm.

hours

ŋ

CANCEL



- ③ Scroll to set the minutes
 - Scroll to select am or pm
 - Press ✓ to confirm.



- ⑤ Press ✓ to confirm the time is correctly set.
 - The clock is now set and you can begin using your oven.

** With this option saved, you can still use the oven and timer, however the display will remain unlit. You cannot use any automatic cooking functions when this option is selected. To quit this option and enable the display, press and hold CANCEL.

4.5 OR90 - Setting the TFT Timer

- You can use the timer at any time, even if you are not using the oven.
- If the time is more than an hour, the display will count down in minutes (h:m). If it is less than an hour, it will count down in seconds (m:s).
- You can set the timer for up to 23 hours 59 minutes.

IMPORTANT!

The timer does NOT turn the oven off.

To set the timer



- ① Press \checkmark to to enter the main menu.
- The timer will be the first option.
- Press \checkmark to enter the timer.



- ② Scroll to set the minutes.
- Press √ to confirm.



- ③ Scroll to set hours.
- Press ✓ to confirm.



The timer is now set and will begin counting down. The display will revert automatically to the home screen.

To edit the timer





- ① From the home screen, scroll to view the active timer.
- ② Press ✓ to enter the timer.
- $\ensuremath{\textcircled{}}$ 3 Scroll to select Edit.
- (4) Press \checkmark to confirm.
- $\ensuremath{{}^{5}}$ Follow the steps previous to adjust the timer.

To cancel the timer





- 1 1 From the home screen, scroll to view the active timer.
- ② Press \checkmark to edit the timer.
- ③ Scroll to select Cancel.
- ④ Press \checkmark to confirm and exit the menu.

When the set time is up



- ① The display will flash with Timer Complete and a tone will sound.
- ② Press ACCEPT or CANCEL to stop the tone sounding.

4.6 Automatic Cooking TFT

Use Auto Cook to

- Turn off the oven automatically after a set period of time.
- Set the oven for food to be ready at a specific time.

Before you start

• Make sure that your oven is displaying the correct time of day and food is in the oven.

IMPORTANT!

Safe food handling: leave food in the oven for as short as time as possible before and after cooking or defrosting. This is to avoid contamination by organisms which may cause food poisoning. Take particular care during warmer weather.

You can choose to either start cooking now or set a delayed cook.

- Choose Start Now if you have started cooking and want to set the oven to turn off automatically after a set period of time.
- Choose Delayed Cook to set the oven to automatically turn on later and be ready at a set time.

To set Auto Cook



① Press \checkmark to enter the main menu.



- ③ Scroll to choose between Cook Now and Delayed Cook.
- Press ✓ to accept.



- Scroll through the menu options to Auto Cook.
- Press ✓ to enter Auto Cook.



- ④ Set the Cook time.
- Scroll to set the minutes.
- Press ✓ to accept.

Automatic Cooking TFT



If you have not already set a function and temperature:

- Set Function and Temp will appear in the display.
- The halos on the oven dials will flash.
- (6) Set a function and temperature using the oven dials.



The display will show a summary of your settings, showing:

- Start time
- Cook time
- End time
- ⑦ Press ✓ to confirm or ⊃ to go back and adjust the settings.

Your oven is now set for automatic cooking.

Automatic Cooking TFT

When Auto Cook is set

- The oven and the lights will stay off, the halos will be unlit, but your oven is now set for automatic cooking. It will automatically turn on at the required time.
- You can modify the function and temperature while the oven is waiting to start cooking.
- If setting Delayed Cook you will need to put the food in the oven before starting.
- For safety reasons opening the door while the oven is waiting to start will cancel Delayed Cook.

While the oven is heating up

IMPORTANT!

- During Auto Cook the grill element will come on while the oven is heating up. Food placed into a cold oven could be prone to burning as the oven heats up.
- Large items and foods with a high fat or sugar content are especially prone to burning. Take particular care with foods such as macaroni cheese, large poultry, and enchiladas.
- Ideal foods for automatic cooking include stews, casseroles, braised meat and potato top pie.
- Position food on a lower shelf to prevent burning.
- Where possible cook food in a pan with a lid, or cover food with foil.

locking the oven controls TFT



the oven controls.

4.7 User Perferance

Adjust the user settings to suit your personal setup preferences.

You can set your oven to:

- 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)
- connect to the wireless network in your house (some models only see fisherpaykel.com for details)

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

How to change preference settings



 From the home screen, press ✓ to enter the main menu.



- Scroll through the menu options to settings.
- Press \checkmark to enter the settings menu.



- Scroll to the setting you want to change.
- Press \checkmark to edit the setting.



- Scroll between the options for each setting. See refer to the table following for which options are available.
- Press ✓ to confirm.
- S The display will confirm that you have changed the setting.

SETTING	DEFAULT OPTION	ALTERNATIVE OPTION(S)			
CLOCK DISPLAY	ANALOG	24 HR	12 HR	DISPLA	Y OFF **
Select between: - Analog and digital display - 12-hr and 24-hr display - Display off** Turn the display off if you only want to use the basic functionalities of your oven.		24:00	12:00	Clock O	display FF
TEMPERATURE SCALE	CELSIUS	FAHREN	HEIT		
Select between degrees Celsius or Fahrenheit.	Degrees Celsius	Degree Fahrenhe	s eit		
AUDIO FEEDBACK	SOUNDS ON	SOUNDS	OFF		
Turn the oven beeps and tones on or off.*	Sounds ON	Sounds OFF			
OVEN LIGHTS	LIGHTS ON	LIGHTS C	OFF		
Have the light off during cooking if you want to save power or want the food you cook to be a surprise for others.	DURING COOKING Lights ON	Lights OFF	COOKIN	G	
SABBATH MODE	SABBATH OFF Sabbath OFF	See 'Sabl instructio	bath Moo ons.	de' for	
LANGUAGE	UK ENGLISH	US ENGL	ISH S	PANISH	FRENCH
Choose the language you would like the oven to display in.	UK English	US Englis	ih E	Espanol	Francaise
WIRELESS CONNECTION	OFF	ON		RESET	
Some models only	OFF	ON		RESET	
Enable wireless connection (required for remote mode).		Please download the Fisher & Paykel app from our webpage and follow the instructions to enable this setting.			
USER SETTINGS RESET	RESET				
Use this to clear all changes to settings and reset to the factory settings.	RESET	Select thi all user se	is option ettings.	and accep	ot to reset

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

** With this option saved, you can still use the oven, and timer, however the display will remain unlit.

Any automatic functions will be cancelled when this option is selected.

To quit this option and enable the display, press and hold CANCEL.

4.8 Sabbath Mode TFT

This setting is designed for religious faiths that observe a 'no work' requirement on the Sabbath.

While your oven is in Sabbath Mode

- The display, dial halos and indicators will be unlit, the controls 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 Mode, first select the 'Lights off' option as described in 'User preference settings', and then set Sabbath Mode afterwards.
- Bake 🔲 is the only function available in Sabbath Mode.

How to set Sabbath Mode



 From the home screen, press ✓ to enter the main menu.



- Scroll through the menu options to settings.
- Press ✓ to enter the settings menu.



- Scroll through the menu options to Sabbath Mode.
- Press ✓ to enter the Sabbath Mode setting.



- Scroll to set the time. You may set the time up to 48 hours.
- Press \checkmark to confirm.
Sabbath Mode TFT



- Select the Bake function.
- 6 Set the desired temperature.



The display will show a summary of your settings, showing:

- Start time
- Run time
- End time
- ⊘ Press ✓ to confirm or ⊃ to go back and adjust the settings.

The display, indicators and dial halos will be unlit and unresponsive, but the oven will bake until you quit Sabbath Mode.

To quit Sabbath Mode

Press and hold CANCEL until the time of day appears in the display, or turn both oven dials back to 0 (OFF).

Sabbath Mode 7 Seg

This setting is designed for religious faiths that observe a 'no work' requirement on the Sabbath.

While your oven is in Sabbath Mode

- The display, dial halos and indicators will be unlit, the controls 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 Mode, first select the 'Lights off' option as described in 'User preference settings', and then set Sabbath Mode afterwards.
- Bake 🔲 is the only function available in Sabbath Mode.

How to set Sabbath Mode



 Press and hold ≡ until there is a beep to enter the user preference menu.



- ② Press ≡ to scroll through to Sabbath setting.
- The default setting is Sabbath Off.



- Press v or A to scroll between Sabbath Off and Sabbath on.
- ④ Press \checkmark to activate the option.
- The display will show 0:00.



S Press ∨ or ∧ to set the time (hrs).
 You may set the time up to 48 hours.



The display, indicators and dial halos will remain unlit and unresponsive, but the oven will bake until you quit Sabbath setting.

To quit Sabbath Mode

Press and hold \times until the time of day appears in the display and the oven turns off.

Sabbath Mode 7 Seg

4.9 Removing the Oven Door

IMPORTANT!

- Do not lift the oven door by its handle. Doing so may damage the door.
- Make sure the oven and the door are cool before you begin to remove the door.
- Before removing the door, make sure there is a large enough clear, protected surface in the kitchen to rest the door on.
- Take care, the oven door is heavy!

To remove the oven door



Open the door fully.



② Open the levers fully on both sides.



③ Holding the door firmly on both sides, gently close it about halfway.



(4) Disengage the hinges and remove the door. Place on a protected surface.

4.10 Replacing the Oven door

To replace the oven door



(1) Hold the door firmly in an approximately halfway open position.



Insert the hinge tongues into the slots, making sure that the notches on both sides drop into place as shown.



 $\ensuremath{\textcircled{}}$ Open the door fully.



④ Fully close the levers on the left and right hinges, as shown, then close the door.

4.11 Inserting the shelves



 Make sure the guard rail is at the back, facing up and the slides are not extended.



Hold the shelf firmly with both hands, making sure you grip the wire shelf too to stop it sliding forward.

④ Push the shelf all the way into the oven,

ensuring the front and rear tags either side are securely locked behind the side



③ Hook the rear tags over the wires of the desired shelf position on both side racks.

To remove the shelves

- ① Wait for the oven to cool down completely.
- Output Hold the shelf firmly with both hands, making sure you grip both the wire shelf and the safety stop below it to stop the shelf sliding foward.

rack wires.

- ③ Pull the shelf forward about $\frac{3}{4}$ of the way.
- ④ Lift the rear of the shelf slightly so that the tags clear the side rack wires, then remove.

4.12 Attaching the kick strip



1 Align the brackets to the mounting

holes located along the tabs at the

top and bottom of the inner panel.



② Secure each bracket to the panel via the mounting holes using four screws per bracket as shown.



③ Slot the kick-strip cover over the outside of the inner panel.



 Adjust the height of the kick-strip cover to suit the height of the feet on your range. Secure at either end of the kick-strip.



③ Align the assembled kick-strip panel with the range feet and push firmly to clip into place.

44 **5 DIAGNOSTICS**

This is an over view of the complete software only.



45 **5 DIAGNOSTICS**

5.1 Entering the Technician Mode

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" on the clock for approx 2 seconds, then remove finger.
- 4. Then press the "REMOTE" ($\sqrt{}$) once on the clock.
- 5. Press & hold the (CANCEL & REMOTE) buttons together for 2 seconds.

The display will then show "Technician mode"



5.2 Technician Mode Navigation

Once in Technician Mode there are 5 possible menus:



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

- To scroll to each component turn the REMOTE button (\checkmark)
- To turn the component on and off PRESS the "REMOTE button"($\sqrt{}$)

Menu 1 - Elements



Component	Wattage (W)
Upper Inner Element	3000
Upper Outer Element	1300
Lower Inner Element	1800
Fan Element X 2	1300 (2600)
Cavity Fan	30
Low Speed Cooling Fan	20 (non pyro) 60 + resistor (pyro)
High Speed Cooling Fan	43
Rotisserie motor	4
Lights	25 each
 Lock Motor Door Switch must be in the closed position Short delay and LCD will display "ON" Will show "of" when turned off 	

Menu 2 - Model ID

This menu will show the model ID of the product, to enter press the "REMOTE Button"($\sqrt{}$) 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.

Model ID	Description	Market
32	OR90 MULTI	AA
33	OR90 PYRO	AA
34	OR90 MULTI	GB, IE, EU
35	OR90 PYRO	GB, IE, EU

Note: If changing a power board or clock module, always check that the correct model ID is set.

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:



Press to go back to

tech menu

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.

уу:

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 - Life Test Mode

This menu is not used in the field, it is for factory use only.



Menu 5 - Demo Mode

To enter this sub menu press the "OK" ($\sqrt{}$) 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.



5.3 Entering the Technician Mode. 4 Buttom clock and 6 button are the same.

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 remove finger.
- 4. Then press the "OK Button" ($\sqrt{}$) once on the clock.
- 5. Push & hold the <> buttons together for 2 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" ($\sqrt{}$) button.
- 8. To exit a sub menu press the (X) button.

5.4 Technician Mode Navigation

Once in Technician Mode there are 5 possible menus:

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" ($\sqrt{}$)



Function chart on following page.

Symbol	Component	Wattage (W)
UI	Upper Inner Element	3000
Uo	Upper Outer Element	1300
LI	Lower Inner Element	1800
FE	Fan Element	1300
CF	Cavity Fan	30
LF	Low Speed Cooling Fan	20 (non pyro) 60 + resistor (pyro)
HF	High Speed Cooling Fan	43
ro	Rotisserie motor	4
Lt	Lights	25 each
LC	 Lock Motor Door Switch must be in the closed position Short delay and LCD will display "ON" Will show "of" when turned off 	

Menu 2 - Model ID

This menu will show the model ID of the product, to enter press the "OK Button" ($\sqrt{}$) 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.

Model ID	Description	Market
32	OR90 MULTI	AA
33	OR90 PYRO	АА
34	OR90 MULTI	GB, IE, EU
35	OR90 PYRO	GB, IE, EU



Note: If changing a power board or clock module, always check that the correct model ID is set.

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.

уу:

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

zz:

Development version. Increments on internal releases.

Menu 4 - Demo Mode

To enter this sub menu press the "OK" ($\sqrt{}$) 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.



Menu 5 - Life Test Mode

This menu is not used in the field, it is for factory use only.



54 6 FAULT DIAGNOSTICS

All errors of the Power Board and the Clock Board are displayed using the seven segment digits on the Clock Board.

There are two types of fault codes,

A – Alert codes: These are customer errors which can be solved by generally letting the product cool down, or powering it off then on at the wall. These codes will show the letter A, followed by a number. Alerts can usually be handled by the user, but they might also indicate an underlying problem if they happen frequently.

F – Failure Faults: These are generally caused by component failure, and will either be in the User Interface (UI) or the Power Board (PB).



(F222 - Power Board Crystal fault)

Example: (Fault)	F 	1	04	F means fault, which typically requires a technician.
				1 means that the error occurred on the Clock Board. 2 means the error occurred on the Power Board.
				xx is the type of the error. In this case "04" means communication error No clock board found.
Example: (Alert)	A1			A indicates an alert, followed by a number, which tells the user the kind of alert and what to do next ("1" means over-temperature).

6.1 User Alert Codes

ALERT CODE	POSSIBLE CAUSES	WHAT TO DO
A1	The oven has overheated.	 Allow the oven to cool down. Once the oven has cooled down and the door has unlocked, the alert code will disappear. You can now use the oven again.
A2	Door lock error: the door cannot be locked after you have started a Self Clean cycle.	 Turn the power to the oven off at the wall and on again. Wait approximately 10 seconds. This is to allow the door lock to return to its initial position. Set the clock. See 'Setting the clock and first use' for instructions. Try starting a Self Clean cycle again, making sure that you close the door firmly. See 'Using the Self Clean function'.
A3	Door lock error: the door cannot be unlocked after a Self Clean cycle has finished.	 Turn the power to the oven off at the wall and on again. Try touching on the oven door to help the door lock disengage. If this doesn't help and the alert code reappears, call your Authorised Repairer or Customer Care.
F2 F + number	Technical fault.	 Note down the alert code. Wait until the cooling fans have stopped and the oven has completely cooled down. Turn the power to the oven off at the wall. Call your Authorised Repairer or Customer Care with the alert code information.

6.2 Failure Alerts

F1 - Clock Board Faults

Туре	Error	Description & Possible Solution
F1	01	Initialization error. No Power Board found.Check connection to Power Board.Replace Power Board.
	02	 Unknown Model ID. The Clock Board does not support the Model ID set on the Power Board. Replace the Clock Board, as that will have a newer version of software in it. Once the oven is working again, check via Technician Mode that the Model ID is correctly set.
	03	General software error.Try powering the oven off and on. If the problem persists, replace the Clock Board.
	04	 Communication error. The Power Board does not respond in time or at all. Check connection to Power Board. If the problem persists, replace Power Board.
	05	 Communication error. Check Model ID is set correctly. Press and hold left and right scroll buttons simultaneously until 'SEt Id' displayed, press the select button, and then scroll to the correct ID number by pressing the right scroll button. Press select to save the ID number.
	06	 Unknown Model ID. The Clock Board does not support the Model ID set on the Power Board. Use a different Clock Board spare that has a newer version of software in it. Once the oven is working again, check via Technician Mode that the Model ID is correctly set.
	08	 I2C Communication error. Check connection between Encoders and the Clock. If the problem persists, replace the Encoders. If the problem persists, replace the Clock.
	16 18	 Crystal Oscillator fault. This can occur during baking with a lot of condensation. Let the oven cool down and dry out. Then power the oven off and on. If the problem persists, replace the Clock Board.
	11 12 13 14 15 17 19 20 21	 Critical software/hardware fault. Try powering the oven off and on. If the problem persists, replace the Clock Board

F2 - Power Board Faults

Туре	Error	Description & Possible Solution
F2	01	 Initialization error. No Clock Board found. 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). Make sure you are setting the correct Model ID. Or try another Power Board spare that has a newer version of software in it. Once the oven is working again, check via Technician Mode that the Model ID is correctly set.
	03	 General software error. 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. Check connection to Clock Board. If the problem persists, replace Clock Board.
	05	 Door lock mechanism error. 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. Make sure the user did not try opening the door during self clean. Check the magnet in the door frame (if applicable). 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. 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. 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.

Туре	Error	Description & Possible Solution
F2	17	 Door lock is not in its unlocked position. 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.
	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. 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. Replace the Power Board. Replace the cavity sensor.
	20 22	 Crystal Oscillator fault. This can occur during baking with a lot of condensation. Let the oven cool down and dry out. Then power the oven off and on. If the problem persists, replace the Power Board.
	11 12 15 18 19 21 23 24	 Critical software/hardware fault. Try powering the oven off and on. If the problem persists, replace the Power Board.
	25	 Fan stall fault. Check the fan runs in normal operation. If not, replace fan. If the fan runs check the connection between the Fan Stall Sensor and Power Module. If the problem persist, replace the cooling fan. If the problem persists, replace Power Module

6.3 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
- Faulty door reed switch

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

6.4 SYMPTOM: Baking Burns on the 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 diagnostics
- Check oven cavity fan in diagnostics
- Replace the power module if no other faulty components can be found.

6.5 SYMPTOM:

1: Baking burns on the bottom

POSSIBLE CAUSES:

60

- 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.

6.6 SYMPTOM: Oven seems to be functioning normally but does not heat

POSSIBLE CAUSES:

- Faulty oven door switch or door not closed (Series 6 models only)
- 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.

6.7 SYMPTOM: Oven heats slowly or fails to reach preset temperature

POSSIBLE CAUSES:

- Incorrect oven use
- Faulty door switch (Series 6 models only)
- 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.

6.8 SYMPTOM: No clock display but oven works

POSSIBLE CAUSES:

• Oven is set to "Display OFF" mode.

DIAGNOSIS:

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

61 7 SERVICING PROCEDURES

7.0 Removing the door hinges

WARNING!

Ensure the product is isolated from the power supply before servicing.

- Remove the door from the product and lay down on a padded surface to stop any scratches to outer door.
- To change the hinges, remove the first pane of inner door glass and set aside as in instruction 8.1.
- Drop the door glass at the front to access the inner hinge screw.
- Unscrew the TWO BLACK grub screws holding the hinge in place.
- Pull the hinge out of the trim and replace with a good one.
- Reassemble in reverse order.

NOTE:

Without the clips, the inner door glass just sits on a very small edge of plastic. BE CAREFUL.

Ensure the FOUR rubber bungs are in place when reassembling the inner glass on PYRO products.

The LONG black screw with the washer goes to the out side.











7.1 Removing the inner glass

- Remove the door from the product and lay down on a padded surface to stop any scratches to the outer door.
- Loosen both the inner and outer screws on both sides holding the lower door trim on. (two turns only) Leave the middle screw in place. (Fig 1)
- Slide the clip inwards (Fig 2)
- Remove the lower trim.
- You can now lift the inner door glass out.
- Reassemble in reverse order.

NOTE:

Be careful as the inner pane of glass might be bowed. This is OK.

The PYRO has three inner door glass panes and the NON PYRO only has one inner door pane.

Make sure all the door glass is clean before reassembling.



Fig 2



Fig 3



Fig 4



• Make sure the glass is the correct way around when reassembling the door. The door graphic should read like this PGW ECO when the door is open.



7.2 Removing the handle and outer door glass

- Remove the door from the product and lay down on a padded surface to stop any scratches to outer door.
- To change the outer door glass, remove the inner door glass as set out in instruction 8.1.
- To remove the handle assembly, remove the 2 screws , one on each side, securing the top trim to the outer door glass extrusion rails. (Fig 1)
- Remove the two 5mm allen key screws securing the handle to the outer door. (Fig 2)
- The extrusion comes with the outer door.
- Reassemble in reverse order.

NOTE:

Make sure all the door glass is clean before reassembling.

7.3 Removing the Fan Shroud

- Remove the oven shelves
- Remove the oven door (optional)
- Remove the 3 retaining screws at the top holding the rear panel.
- Pull the panel slightly forward and upwards to release the bottom tabs of the panel.
- The panel will now be able to be removed.

7.4 Removing the Fan Element

- Remove the fan shroud as per instruction 8.2.
- Remove the 3 screws retaining the fan element to the rear panel.
- Pull the element slightly forward to gain access to the wiring.
- Remove the wiring and fit to new element, reassemble in reverse order.



Fig 2







7.5 Removing the Grill Element

- Remove the fan shroud.
- (Pyro model only) Remove the 2 screws retaining the element to the roof of the oven cavity.
- (multi/mid models) Unscrew the retaining nut in the centre of the element to release.
- Remove the two screws securing the element to the rear wall of the oven cavity.
- Pull the element slightly forward to gain access to the wiring.
- Remove the wiring and fit to the new element, reassemble in reverse order.



7.6 Removing the Bake Element

- Remove the rear panel to gain access to the bake element.
- Remove wiring to the element.
- Lift the insulation up to gain access to the panel securing screws.
- Remove the two screws holding the controller in place and the two screws holding the element to the panel.
- Remove the screws holding the panel and slide the element out from under the oven cavity.
- Replace the element and reassemble in reverse.









7.7 Removing the Cavity Fan

- Remove the fan shroud.
- Remove the fan blade by removing the nut, hold the fan blade while undoing the nut, which is left or right hand thread depending on the fan.
- Remove the rear panel to gain access to the fan motor.
- Remove the wiring to the fan motor.
- Remove the 3 screws holding the fan in place and pull the motor out.
- Reassemble in reverse order.

Note: The motor on the RIGHT is unscrewed from the rear and the one on the LEFT is unscewed from inside the cavity.







7.8 Removing the Cooling Fan

- Remove the hob to give you enough room at the back to get to the cooling fan screws.
- Remove rear outer panels to gain access.
- Remove the wiring to the cooling fan motor.
- Slide the cooling fan from the duct to release.



	4	
- 11		

7.9 Removing the Door Switch. PYRO ONLY

- Remove the hob.
- The door switch is located on the left hand side onside the hob area.
- Remove the seven screws from the plate the door switch is attached to and lift up.
- Remove the two nut and bolts holding the switch to the plate.
- Remove the wires and replace the switch. Reassemble in reverse order.



7.10 Removing the Function and Temperature encoders

- Remove the hob to give you enough room to pull the encoders out.
- Remove the dial from the front. Be careful with the plastic clips on the bezels.
- Using long nose pliers, remove the nut from the encoder shaft.
- Remove the harness from the encoder.
- Replace the faulty encoder and reassemble in reverse order.





7.11 Removing the TFT Clock

- Remove the hob to give you enough room to get to the rear of the clock.
- Remove the harnesses from the rear of the clock module.
- Pull the LEFT **"Cancel"** button on the front of the clock. It just pulls off.
- Leave the RIGHT Remote button in place.
- The clock is held in with 4 VERY small 5.5mm nuts on the back. Carefully remove the nuts using a small 5.5mm socket driver. DO NOT DROP THEM
- The clock can now be replaced.
- Reassemble in reverse order. You will need to hold the front of the clock face in place while you reassemble the clock.



UNSCREW LEFT BUTTON ONLY





7.12 Removing the 7 seg electronic Clock



- Remove the hob enough to get to the rear of the clock.
- Remove the harnesses from the clock rear of the clock module.
- UNSCREW all the clock buttons. Be careful not to break the shaft. **DO NOT PULL THEM OFF.**
- Remove the two top and bottom phillips screws holding the clock bracket in place.
- You can get to the two bottom screws by opening the door.



UNSCREW THE BUTTONS ONLY





7.13 Removing the Power board

- Remove the rear cover of the product.
- The power board is located on the rear of the product and held in by plastic clips, squeeze the clip to release.
- Remove the wiring and harnesses and transfer to the new PCB.
- Once assembled and fitted, check the model ID is correctly set for the product you have.



7.14 Removing the Temp Sensor

- Remove the back panel to gain access to the temperature sensor harness.
- Remove the door to access the sensor (optional)
- Remove the 2 screws holding the temp sensor in place. Its on the L/H side of the oven cavity.
- Remove the sensor harness and un-clip it, thread the harness through the clips and remove the sensor from the oven cavity.





7.15 Removing the Induction Hob

- Remove the rear cover of the product.
- Remove the two screws on each side that hold the hob down at the rear.
- Remove the two vent tubes from the hob by just pulling them down carefully.
- Slide the hob forward about 10mm and lift it off.



7.16 Removing the Gas Hob

- Remove the trivets and the burner caps.
- Remove the rear cover of the product.
- Remove the two screws on each side that hold the hob down at the rear. (see above)
- Remove the all 14 screws holding the hob down. 3 on each of the large burners and 2 each on the smaller burners.
- Lift the hob off.
- Reassemble in reverse order.





Oven Mode Elements and Fan Profiles

Function	Stage	Oven Fan	Cooling	Lights	Vent Fan	Grill Outer Element 1300W	Grill Inner Element 3000W	Bake Ele- ment 1800W	Fan Elements 2600W (1300)
Bake	rap-preheat	X	Х	Х	Х		X	Х	
	Cook		Х	Х	Х	X 67%		Х	
Fan Bake	rap-preheat	X	Х	Х	Х		X	X	
	Cook	Х	Х	Х	Х	X 67%		Х	
Fan Forced	rap-preheat	Х	Х	Х	Х	Х		Х	
	Cook	X	Х	Х	Х				Х
Full Grill	Cook		X*	Х	Х	Х	Х		
Fan Grill	Cook	Х	X*	Х	Х	Х	Х		
Pasrty Bake	preheat	X	Х	Х	Х		X 90%	Х	
	Cook <210 ºC	X	Х	Х	Х			Х	
	Cook >210 ºC	Х	Х	Х	Х	X 40%		Х	
Pizza	preheat	Х	Х	Х	Х		X 90%	X	
	cook					X 40%		X	
Roast	cook	Х	X*	Х	x	Х	Х	1	
	Cook		Х	Х	Х	X 67%		Х	
Self Clean	<250 ºC		Х		Х		X	Х	
	>250 ºC #		X*		Х		Х	X 50%	
	>250 ºC #		X*		Х	X 50%	Х		

* cooling fan on high speed




FISHERPAYKEL.COM

© Fisher & Paykel Appliances 2019. All rights reserved. The product specifications in this booklet apply to the specific products and models described at the date of issue. Under our policy of continuous product improvement, these specifications may change at any time. You should therefore check with your Dealer to ensure this booklet correctly describes the product currently available.

AA GB

591463 ISSUE 2 02.19