30DSERIES

turbofan

E31D4 (Digital Operation)

Service Manual





MOFFAT

Monday, 4 August 2014

Amendment 9

MANUFACTURED BY

Moffat Limited

Christchurch New Zealand

INTERNATIONAL CONTACTS

AUSTRALIA

Moffat Pty Limited E.Mail: Main Office:

vsales@moffat.com.au		
(tel) (03) 9518 3888		
(fax) (03 9518 3833		
(tel): 1800 622 216		
(tel): 1800 337 963		
(tel): 1800 335 315		
(fax): 1800 350 281		

CANADA

www.servecanada.com
info@servecanada.com
(tel): 800 551 8795 (Toll Free)
(tel): 800 263 1455 (Toll Free)

NEW ZEALAND

Moffat Limited	
Web:	www.moffat.co.nz
E.Mail:	sales@moffat.co.nz
Main Office:	(tel): 0800 663328

UNITED KINGDOM

Blue Seal			
Web:	www.blue-seal.co.uk		
E.Mail:	sales@blue-seal.co.uk		
Sales:	(tel): 0121 327 5575		
	(fax): 0121 327 9711		
Spares:	(tel): 0121 322 6640		
-	(fax): 0121 327 9201		
Service:	(tel): 0121 322 6644		
	(fax): 0121 327 6257		

UNITED STATES

Moffat	
Web: w	ww.moffat.com
Sales: (t	el): 800 551 8795 (Toll Free)
(t	el): 336 661 1556
(f	ax): 336 661 9546
Service: (t	el): 800 858 4477 (Toll Free)
(t	el): 366 661 1556
(f	ax): 336 661 1660

REST OF WORLD

Moffat Limited	
Web:	www.moffat.co.nz
E.Mail:	export@moffat.co.nz

The reproduction or copying of any part of this manual by any means whatsoever is strictly forbidden unless authorized previously in writing by the manufacturer.

In line with policy to continually develop and improve its products, Moffat Ltd. reserves the right to change the specifications and design without prior notice.

E31 Turbofan Convection Oven.

Model N	odel Numbers Covered in this Manual				
E	31D4 - Turbofan Oven - 4 Tray Convection Oven.				
1	L. Specifications	.2			
2	2. Installation	.3			
	Installation Requirements				
	Unpacking				
	Location				
	Clearances				
	Stand Mounted Ovens				
	Electrical Connection				
	Positioning and Levelling of Oven				
	Initial Start-Up				
3	3. Operation	.5			
	Oven Control Panel				
	Setting the Operator Accessible Parameters				
	Table of Operator Accessible Parameters				
	Setting the Oven Programs				
4	I. Fault Finding	.8			
	Operational Faults				
	Component Testing				
	Element Resistance and Current Value Table				
	Probe Resistance Value Table				
5	5. Service Procedures	LO			
	5.1 Access				
	5.2 Replacement				
	5.3 Adjustments and Calibration				
	5.4 Controller Parameters				
6	5. Electrical Schematics	L 7			
7	7. Wiring Diagrams	18			
8	3. Replacement Parts List	L 9			
9	9. Accessories	25			
A	Appendix 1 - Oven Door Reversal	26			

WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY. IMPROPER INSTALLATION, ALTERATION, ADJUSTMENT, MAINTENANCE OR SERVICE MAY CAUSE PROPERTY DAMAGE, INJURY OR DEATH. ENSURE SUPPLY IS SWITCHED OFF BEFORE SERVICING. ALWAYS TEST AFTER SERVICE REPAIRS.

<u>E31D4</u>



Over Dewer Datings			Oven Tray Details		
	Jven Po	wer Kau	ngs	Tray Capacity	Tray Spacing
208V,	1P+N+E,	50/60HZ,	2.9 kW		
220V,	1P+N+E,	50/60HZ,	3.1 kW	4 x GN 1/1 Pan 4 x US ½ Pan	80 mm / 3 ¹ / ₆ "
230-240V,	1P+N+E,	50/60HZ,	3.1 kW		

Installation Requirements

Important:

- Installation shall comply with local electrical, health and safety requirements.
- It is most important that this oven is installed correctly and that oven operation is correct before use.
- If you have any questions regarding the proper installation and / or operation of this oven, please contact your local Turbofan distributor.

Unpacking

- 1. Remove all packaging and transit protection including all protective plastic coating from the exterior stainless steel panels.
- 2. Check the oven and supplied parts for damage. Report any damage immediately to the carrier and distributor.
- 3. Check that the following parts have been supplied with your oven:-
 - 4 x Leg Adjustable.
- 4. Report any deficiencies to the distributor who supplied your oven.
- 5. Securely fit the 4 legs supplied with the oven.
- 6. Check that the available electrical supply is correct to that shown on the Technical Data Plate located on the front right hand side panel.
 - Refer to 'Specifications' section, 'Oven Specifications Tables'.

Location

- 1. Position the oven in its approximate working position.
- The unit should be positioned so that the control panel and oven shelves are easily reachable for loading and unloading.

turbofan

Clearances

To ensure correct ventilation for the motor and controls, the following minimum installation clearances are to be adhered to:-

Тор	200mm / 8".
Rear	75mm / 3".
Left-hand side	75mm / 3".
Right-hand side	75mm / 3".

CLEARANCE FROM SOURCE OF HEAT.

A minimum distance of 300mm (12") from appliance sides is required.

NOTE: Fixed installations require at least 500mm - 20" clearance at right hand side of oven for service access.

Important:

The vent located at the rear of the oven must NOT be obstructed.





For ovens that are to be mounted to a stand, the oven feet are used to level the oven on the stand. Refer to the instructions supplied with separately ordered stands for mounting details.

Technical Data Plate - Location

3.

Electrical Connection



This oven must be earthed / grounded. If the supply cord is damaged, it must be replaced by a suitably qualified person in order to avoid a hazard.

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

Check the electricity supply is correct to as shown on the Technical Data Plate on the front right hand corner of the oven side panel.

Ensure that the oven is fitted with the appropriate power cord and plug.

Positioning and Levelling of Oven

1. Correctly locate the oven into its final operating position and using a spirit level, adjust the oven feet so that the oven is level and at the correct height.

Initial Start-Up

Before using the new oven;

- For first time use of the oven, operate the oven for about 1 hour at 200°C / 400°F to remove any fumes or odours which may be present.
- Please refer to the Operation Section of this manual for details on how to correctly operate and shutdown the oven.

Commissioning

Before leaving the new installation;

Check the oven functions in accordance with the operating instructions specified in the 'Operation' section of this manual.

Ensure that the operator has been instructed in the areas of correct operation and shutdown procedure for the appliance.

NOTE: If for some reason it is not possible to get the appliance to operate correctly, turn off the power supply at the mains supply and contact the supplier of this appliance.

Operation Guide





during baking. Let hot air and steam escape before removing or replacing food as the steam produced can cause steam burns.

- Turbofan Ovens have been designed to provide simple operation.
- This oven is intended for use in a commercial kitchen and must only be put to the use for which it was intended, i.e. cooking food product. To use this oven correctly please read the following sections carefully:-

Oven Control Panel



Setting the Operator Accessible Parameters

With the Oven in 'Stand-By' mode:-

1. ENTER THE OPERATOR PARAMETER MODE.

Press 'Grill / Broil' and 'Start / Stop' buttons together.

'Temperature' Display will show 'PAS'.

The 'Time' Display will flash.

2. SET PASSWORD.

Rotate 'Timer Control' to set password; (123) (Operator Password).

Press 'Light On / Off' button to confirm password.

'Temperature' Display will show one of Parameter Codes.

'Time' Display will show value of the parameter.

3. SETTING THE PARAMETERS.

Rotate 'Timer Control' to parameter required.

Press 'Light' button to confirm parameter. 'Time' display will flash.

While 'Time' display is flashing, rotate 'Timer Control' to select value required.

Press 'Light' button to confirm value. 'Time' display will stop flashing.

4. EXITING THE PARAMETER MODE.

Press 'On-Off' button, to return to 'Stand-By' mode.

Table of Operator Accessible Parameters

Parameter Number.	Description	Default Setting
PrH	Turn -On Pre-Heating Temperature. (60 - 260°C / 140 - 500°F).	150°C (325°F)
L - 0	Light Auto 'Off' Setting Time - 0 = 'On/Off'. 1 = 1 minute auto 'Off'. 2 = 2 minutes auto 'Off', etc.	1
uol	Buzzer Volume - Can be adjusted from '0' to '10'.	5
PrE	Preheat Ready Temp above Set Temp (Programs Only) - (Can be adjusted from 0 to 30°C {0 to 54°F} above <u>Cooking Temperature</u>).	20°C (36°F)

6.





Setting the Oven Programs

Oven can be pre-programmed with up to 20 Program's. When you receive your oven, the controller is not programmed. To set programs, carry out the following for each program required:-



Fault Finding

OPERATIONAL FAULTS				
FAULT	FUNCTIONS	OTHER INDICATORS	CAUSE	
			Not plugged in.	
		No over fin diano no olibio	Power supply switch off.	
Oven not operating		No oven functions possible.	Fuse blown or Circuit breaker tripped.	
			Power cord damaged.	
		No power to transformer.	Overtemp tripped.	
Controller `Off '	Power to oven 'On'	12 Vac from transformer.	Controller faulty.	
		No 12 Vac from transformer.	Transformer faulty.	
		Power to relay.	Relay faulty.	
No Heat	Controller indicates 'On'	Power to element.	Element faulty.	
No Heat, Lights, Grill	Controller indicates on		Plug off controller.	
N	Controllor indicator)Or/	Device to fee	Plug is disconnected from controller.	
NO FAN	Controller Indicates 'On'.	Power to fan.	Fan faulty.	
	Controllor indiantas)On/	Power to relay.	Relay faulty.	
Grill not Heating	Controller indicates 'On'	Power to element.	Element faulty.	
Light `Off'	Oven 'On'	Lamp switch LED 'On'.	Lamp faulty.	
Still heating	Oven switched 'Off'		Relay stuck `On'.	
			Door seal incorrectly fitted.	
Door does not fully close			Tray in way of door.	
			Door not fitted correctly.	
Oven door hot			Inner glass not fitted.	
			Too high a temperature selected.	
			Oven overloaded with too much product.	
			Insufficient air space around trays or baking tins.	
Uneven cooking			Opening oven door un-necessarily.	
			Oven door seal damaged or faulty.	
			Oven or racks not level.	
			Oven vent restricted.	

CONTROLLER FAULT CODES				
FAULT CODE CAUSE				
dor			Door Open.	
	Door closed.		Microswitch open circuit.	
Err 001			Oven Temperature Probe Fault.	
Err 003			Loop wire disconnect in Door Microswitch plug at control board.	

Fault Finding

COMPONENT TESTING							
ITEM	ITEM CONDITION TESTING FOR REPLACE						
Overtern (Duch Beact)	Oven power OFF.	Continuity through switch.	If open circuit.				
Overtemp (Push Reset).	Voltage at Overtemp.	Check power to switch and power out of switch.	If no power out.				
Transformer	Voltage at Transformer.	With controller connected 12Vac output.	If no 12Vac.				
Controller	Voltage at Controller.	Output to relays, lights fan.	If no.				
Door Switch	Oven power OFF.	Continuity through switch.	If open circuit.				
Temperature probe	Disconnected.	Resistance.	If not correct.				
Flowent	Oven power OFF.	Continuity.	If open circuit.				
clement	Voltage at Element.	Check current draw.	If low or zero.				
Relay	Voltage at Relay Coil.	Does relay switch.	If no.				
Relay contacts	Voltage at Relay Contacts.	Check power to switch and power out of switch.	If no power out.				
Fan Motor	Voltage at Fan.	Does fan rotate.	If no.				

	ELEMENT RESISTANCE & CURRENT VALUES					
Model		Watts	Voltage	Resistance ± 5% @20°C (68°F)	Current ± 5%	
E31D4	Bottom	2200W	230 - 240V	26.5 Ω	9.1A @ 240V	
	D	200014	208 2201	21.6 Ω	9.6A @ 208V	
	DOLLOIN	2000	208 - 2200		υν 21.6 <u>Ω</u>	10A @ 220V
	Top Outer	900W	230 - 240V	64 0 Ω	3.8A @ 240V	
	Top Inner	2000W	230 - 240V	28.8 Ω	8.3 @ 240V	
	Top Outer	900W	208 2201	52.8 0	3.9A @ 208V	
			208 - 2200	55.0 52	4.1@ 220V	
	Top Inner	2000W 208 - 220V	200014/	208 - 2201/	24.2.0	8.6A @ 208V
			200 - 2200	24.2 52	9.1@ 220V	

TEMPERATURE PROBE RESISTANCE PT1000

Temperature °C (°F)	Resistance ± 5%
0 (30)	1000 Ω
10 (50)	1039 Ω
20 (68)	1078 Ω
30 (86)	1117 Ω
40 (104)	1155 Ω
50 (122)	1194 Ω
60 (140)	1232 Ω
70 (158)	1271 Ω
80 (176)	1309 Ω
90 (194)	1347 Ω
100 (212)	1385 Ω
110 (230)	1423 Ω
120 (248)	1460 Ω
130 (266)	1498 Ω
140 (284)	1536 Ω
150 (302)	1573 Ω
160 (320)	1610 Ω
170 (338)	1648 Ω
180 (356)	1685 Ω

5.1 Access	5	
5.1.1	Control Panel	11
5.1.2	Overtemp	11
5.2 Replac	cement	
5.2.1	Controller	12
5.2.2	Encoder	12
5.2.3	Transformer	12
5.2.4	Relay	12
5.2.5	Overtemp	13
5.2.6	Door Microswitch	13
5.2.7	Fan Motor	13
5.2.8	Temperature Probe	14
5.2.9	Element Top	14
5.2.10	Element Bottom	14
5.2.11	Door Inner Glass	14
5.2.12	Door Removal	15
5.2.13	Door Hinge	15
5.3 Adjust	ment & Calibration	
5.3.1	Door Microswitch Adjustment	15
5.3.2	Temperature Calibration	15
5.4 Contro	oller Parameters	
5.4.1	Controller Parameters	16

5.1 Access

5.1.1 Control Panel

- 1. Remove screw on underside of control panel.
- 2. Lift panel up to unhook at top.



5.1.2 Overtemp

- 1. Locate the overtemp reset button on the rear underside of the oven.
- 2. Push in centre plunger to reset.



5.2 Replacement

5.2.1 Controller

- 1) Remove control panel (refer 5.1.1).
- 2) Disconnect cables (7).
- 3) Undo securing nuts (8) 7mm, 9/32".



5.2.2 Encoder

- 1) Remove Encoder knob.
- 2) Remove control panel (refer 5.1.1).
- 3) Remove controller if necessary (refer 5.2.1).
- 4) Disconnect Encoder from Controller.
- 5) Remove 2 securing screws.



5.2.3 Transformer

- 1) Remove control panel (refer 5.1.1).
- 2) Disconnect power from transformer (2 yellow wires).
- 3) Remove back panel.
- 4) Disconnect power to transformer.
- 5) Remove screws.



5.2.4 Relay

- 1) Remove back panel.
- 2) Disconnect wires from relay, note their positions.
- 3) Remove securing screws.

5.2.5 Overtemp

- 1) Remove back panel.
- 2) Remove wires from overtemp.
- 3) Unhook back of phial from holder inside oven.



- 5) Pull phial towards back of oven to remove from front holder.
- 6) Remove phial through back of oven.
- 7) Undo the two screws securing the overtemp to the base panel.



- 8) To install new overtemp feed capillary and phial through oven cavity.
- 9) Push phial through front holder and then locate rear of phial into back holder.
- 10) Secure overtemp in position.

5.2.6 Door Microswitch

- 1) Remove back panel.
- 2) Remove wires from switch.
- 3) Remove switch.
- 4) Check adjustment when new switch fitted.



5.2.7 Fan Motor

- 1) Remove Baffle plate.
- Undo fan blade securing nut clockwise to undo. (13mm)



- 3) Remove back panel.
- 4) Remove wires from fan motor.
- 5) Undo fan motor securing screws.



5.2.8 Temperature Probe

- 1) Remove control panel (refer 5.1.1).
- 2) Remove probe connection from controller.



- 3) Remove back panel.
- 4) Pull cable to rear of oven.
- 5) Undo probe securing screw inside oven.
- 6) Withdraw probe from rear of oven.



5.2.9 Top Element

- 1) Remove back panel.
- 2) Remove element wires from terminals.
- 3) Remove baffle plate.
- 4) Remove securing screw.



5.2.10 Bottom Element

- 1) Remove back panel.
- 2) Remove element wires from terminals.
- 3) Remove bottom element cover and baffle plate.
- 4) Remove securing screws.



5.2.11 Door Inner Glass

1) Undo inner glass retaining clip.



- Lift inner glass up and pull bottom outwards to free bottom pivot. Note spacer is a loose fit over the pivot and may fall out.
- 3) Lower inner glass to free top pivot and remove glass.



- 14 -

5.2.12 Door Removal

- 1) Remove inner door glass (refer 5.2.11).
- 2) Whilst supporting the door, unscrew and remove the top door pivot bolt from the top door hinge assembly.



3) Lift door off bottom hinge.

5.2.13 Door Hinge

- 1) Remove door (refer 5.2.12).
- 2) Remove 2 Hinge plate screws.



Remove Top or Bottom Hinge Screws.

5.3 Adjustments

5.3.1 Door Microswitch

- 1) Remove back panel.
- 2) Bend activation arm so switch open circuits when door is open.
- 3) Check adjustment when door is opened and closed.



5.3.2 Temperature Calibration

- 1) Place temperature probe in centre of the oven.
- 2) Close door and allow temperature to stabilise.
- 3) Enter service parameters settings menu on control and check P10 Temperature Offset.

5.4 Controller Parameters

5.4.1 Controller Parameters

- 1) With the controller off, press Grill/Broil and Start/ Stop for 5 seconds.
- 2) **PRS** Is displayed in the Temperature display.
- 3) Turn the timer encoder knob until <u>321</u> is displayed in the Timer Display.
- 4) Push the Light button to enter.
- 5) Temperature display indicates current parameter, Timer display indicates the parameter value.
- 6) See table for allowable values, default settings and descriptions. Note 31 has to be set at **P2**.

Parameter Number	Description	Min	Max	Default	Value	S/0
P1	Temperature Scale	°C	°F	°C	°C(°F)	S
P2	Oven Model.	31	32	31		S
P3	Minimum Temperature Setpoint.	0(32)	300(572)	60(140)	°C(°F)	S
P4	Maximum Temperature Setpoint	0(32)	300(572)	260(500)	°C(°F)	S
P5	NOT SHOWN WHEN P2 SET TO 31					
PrH	Pre-heat Temperature.	P3	P4	150(325)	°C(°F)	0
P7	NOT SHOWN WHEN P2 SET TO 31					
P8	Hysteresis Temperature Gap.	1	10	1	0	S
P9	Temperature Regulation Offset.	0	10	0	0	S
P10	Chamber Temperature Offset. (This offset is always added to the raw temperature measurement, in order to correct the value. The value shown on the display is the corrected value).	-25(-45)	25(45)	20(36)	°C(°F)	S
P11	Maximum Timer Setpoint.	1	180	180	Min	S
P12	Timer Preset.	1	P11	0	Min	S
L-0	Time Light stays on	0	60	0	Min	0
P14	NOT SHOWN WHEN P2 SET TO 31					
P15	NOT USED WHEN P2 SET TO 31.	0	60	10	Min	S
P16	NOT SHOWN WHEN P2 SET TO 31					
P17	NOT SHOWN WHEN P2 SET TO 31					
VoL	Buzzer Volume	0	10	5		0
P19	Grill Temperature Setpoint	0(32)	300(572)	280(536)	°C(°F)	S
P20	NOT USED WHEN P2 SET TO 31.	0	1	1		S
P21	Program Mode - Pre-heat temp condition.	0(32)	30(54)	20(36)	°C(°F)	0
P22	Door open time—Program Mode Only	30	180	60	Sec	S

- 1) To change the parameter turn the timer encoder knob.
- 2) To enter the parameter, to change it's value, press the light button.
- 3) To change the value turn the timer encoder knob.
- 4) To enter the value press the light button.
- 5) Press on/off button to exit.

Electrical Schematic E31D4 Turbofan Oven



Wiring Diagram E31D4 Turbofan Oven

208V, 50/60Hz. 220V, 50/60Hz. 230-240V, 50/60Hz



Outer Assembly



Item	Part No	Description	*RPL
1	M233164	WRAPPER E31	D
2	M232680	OVEN VENT REAR COVER	D
3	M233161	REAR PANEL E31	D
4	M232379	ADJUSTABLE FOOT 3" / 76mm	D
5	M232380	FOOT O-RING	С
6	M234574	DOOR ASSEMBLY E31D (COMPLETE)	С

*Recommended Parts Level		
RPL	Number of units in service	
A	1-5	
В	5-10	
С	10-50	
D	50+	

Elements & Motor



*R	*Recommended Parts Level		
RPL	Number of units in service		
A	1-5		
в	5-10		
С	10-50		
D	50+		

Item	Part No	Description	*RPL
7	M234462	OVEN ELEMENT TOP 230-240V - ALL	В
1	M234463	OVEN ELEMENT TOP 208-220V - US, CAN	В
8	M233862	MICROSWITCH	Α
	M235126	MICROSWITCH RETURN SPRING (NOT SHOWN) (From Lot # 10400001)	В
9	M013431K	FAN MOTOR KIT (208 / 240V, 50 / 60HZ)	В
10	M013432	FAN	В
	M025400	OVERTEMP THERMOSTAT 360°C / 680°F. (All Other Markets up to Ser No.	Δ
	1023400	749116. UK up to Ser. No. 749300).	~
11	M233573	OVERTEMP THERMOSTAT CAP (NOT SHOWN). (All Other Markets up to	С
		Ser No. 749116. UK up to Ser. No. 749300).	Ŭ
	M234821	OVERTEMP THERMOSTAT 355°C - 20K. (All Other Markets from Ser No.	А
		749117. UK from Ser. No.749301).	
12	M234202	OVEN ELEMENT BOTTOM 230-240V. ALL	В
12	M234203	OVEN ELEMENT BOTTON 208-220V. US, CAN	В
13	M235277	DOOR ROLLER CATCH STRIKE PIN	Α
	M235278	STRIKE LOCKING NUT	С
14	M234464	DOOR SEAL E31	В
15	M234483	ELEMENT SUPPORT E31	D

Oven Racks & Lamps



ltem	Part No	Description	*RPL
16	M234204	SIDE RACK LH E31	D
17	M004595	FAN BAFFLE E31	D
18	M003002	OVEN LAMP LENS	В
19	M231814	LAMP G9/25W 230V HALOGEN	A
20	M234048	LAMP ASSEMBLY G9/25W COMPLETE	A
21	M234205	SIDE RACK RH E31	D
22	M234206	BOTTOM ELEMENT GUARD	D
23	M233567	WIRE RACK E31	D
24	M233552	THUMBSCREW	В

*Recommended Parts Level		
RPL	Number of units in service	
A	1-5	
в	5-10	
С	10-50	
D	50+	

Gear Plate





ltem	Part No	Description	*RPL
25	M234429	TRANSFORMER 208/240V x 12VAC SEC 20VA	В
26	M024562	RELAY 25A DPDT	В
27	M026160	TERMINAL BLOCK	С
28	M233870	CABLE ENTRY CLAMP	D
29	M233871	CABLE ENTRY SCREW	D

*Recommended Parts Level		
RPL	Number of units in service	
Α	1-5	
В	5-10	
С	10-50	
D	50+	



D 50+



ltem	Part No	Description	*RPL
30	M234579	DOOR HANDLE E31	D
31	M234930	DOOR HINGE KIT (Includes top and bottom hinges)	В
	M234752	HINGE PIVOT KIT (Include pivot pin, pivot bush and washer)	В
32	M234725	DOOR CATCH BLANKING PLATE	С
33	M041045	SCREW 8x3/8" TRUSS HD PHL NP	С
34	M234779	INNER GLASS RETAINING CLIP	С
35	M234756	DOOR INNER GLASS ASSY E31D	С
36	M234767	INNER GLASS PIVOT SPACER	D
38	M234580	DOOR ROLLER CATCH	D
39	M234818	INNER GLASS LATCHING STUD	D
40	M234835	DOME PLUG	D
48	M235276	DOOR OUTER GLASS ASSEMBLY	С

Controller



ltem	Part No	Description	*RPL
41	M237447K	OVEN TEMPERATURE PROBE Kit	В
42	M236256	DIGITAL CONTROL KIT (D-Series)	В
43	M234450	ENCODER	В
44	M234436	CONTROL PANEL LAMINATED E31D	D
45	M234447	KNOB INDEX	С
46	M233865	BADGE MOFFAT	D
	M233867	BADGE BLUESEAL UK, CAN	D
47	M228132	BADGE CLIP	D

*Recommended Parts Level	
RPL	Number of units in service
A	1-5
в	5-10
С	10-50
D	50+

SK STANDS



SK2731N — Stand for E31 810mm/32"(W) x 650mm/25½"(D) x 900mm/35½"(H) Accepts EN 600x400 or GN1/1 pans



SK2731U — Stand for E31 810mm/32"(W) x 650mm/25½"(D) x 900mm/35½"(H) Accepts US ½ and US full pan

DSK Double Stacking Kits



Reversing the Oven Door

- Refit all screw fasteners using a low-mid strength thread locking adhesive unless otherwise stated.
- Door reversal should only be carried out by a suitably competent person.

Remove the Oven Door Inner Glass.

- 1. Open the oven door and open the door inner glass.
- Remove screw securing inner glass retaining clip and remove clip.
- 3. Lift up inner glass and remove, ensuring that pivot spacer is removed from lower inner glass pivot and retained.
- Remove black plastic plugs from top and bottom of door and fit to holes where inner glass pivots were removed from.

Remove the Oven Door.

5. Remove the door roller catch and blanking plate from the inside of the door and swap these over.



- Whilst supporting door, unscrew and remove top door pivot bolt from top door hinge assembly.
- 7. Remove door and lay on a flat surface or workbench.
- 8. Unscrew screws securing the door handle remove door handle.
- 9. Remove top door hinge and fit to bottom opposite corner of door.
- 10. Remove bottom door hinge and fit to top opposite corner of door.



Remove Screw and

Retaining Clip.

Fit Blanking Plugs.





11. Remove inner glass latching studs and fit to opposite side of door using **Loctite 243** to secure.



12. Turn door handle over and fit to other end of door where hinges were removed from. Ensure Flat of handle is to the outside.

Remove Upper and Lower Door Hinges and Door Catch.

 Remove bottom door pivot bolt and spacers and fit pivot bolt to top door hinge assembly (as this will be swapped over and fitted to bottom of other side of oven).



14. Remove the 4 blanking screws from front of oven.



Remove screws top and bottom and fit to where hinges removed



- 15. Remove Hinge Plate from top of oven and fit diagonally opposite, to lower corner.
- 16. Remove Hinge Plate from bottom of oven and fit diagonally opposite, to upper corner.
- 17. Fit screws removed at Item 14 above to where hinges were fitted.



Remove these screws to remove top and bottom hinges.



18. Remove Blanking Screw and Door Catch from front of oven and swap around (refer 'Adjusting Door Catch').



Top Door Pivot Bolt.

19. Fit door spacers removed at Item 13 previously, to lower hinge pivot bolt.

Oven Door Re-Fitting

Fit the Door.

 Refit oven door by locating bottom of door onto bottom hinge plate pivot bolt and spacers.



Fit Inner Glass to Door.

- NOTE: It is important to ensure that the inner glass is fitted correctly and that the glass pivots at the hinge end of the door and not the handle end.
- 3. Fit pivot spacer removed at Item 3 on previous page, to the lower inner glass pivot and locate inner glass lower pivot into position on inside of door.
- Locate top pivot of inner glass into top of door and secure in position with inner glass retaining clip.



5. Lift inner glass up onto locking catch to lock glass into position.



Adjust Door for Correct Alignment.

Check alignment and operation of the door. Ensure that the door is correctly aligned horizontally and vertically.

- To align, slacken off the upper and lower hinge plates and correctly align the door. Re-tighten both hinge plates.
- Check that the roller catch correctly retains door in the closed position.
- To adjust, slightly loosen screws securing roller catch and close the door. The roller catch will centralise itself.
- 4. Open door and tighten roller catch securing screws.



Slacken these screws to adjust door vertically - horizontally.



Adjusting Door Catch

If the door sealing requires adjustment, carry out the following to adjust:-

- 1. Check that the door seals correctly when closed, by placing a sheet of paper between the door and the seal.
- Close the door on the paper and attempt to withdraw the paper by firmly tugging on the paper. The paper should just pull out with some resistance but without tearing.



- 3. To adjust the door catch, loosen the locking nut on the door catch:-
 - a. If the paper withdraws easily, *screw the door catch* '*In' by ½ a turn* and repeat the test above until adjusted correctly.
 - b. If the paper cannot be withdrawn and the door springs open, *screw the door catch 'Out' by 1/2 a turn* and repeat the test above until adjusted correctly.
- 4. Tighten the locking nut on the door catch.