

MD-SERIES

SERVICE MANUAL

Part No. 32Z3329 Issue No. 6

For all MD-Series models manufactured from January 2001

CAUTION MICROWAVE EMISSIONS

**DO NOT BECOME EXPOSED TO EMISSIONS FROM THE MICROWAVE
GENERATOR OR PARTS CONDUCTING MICROWAVE ENERGY**

SERVICE MANUAL

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From January 2007 only the MD1800 Microwave Oven model is being manufactured. All the other MD Series ovens are discontinued.

Note that the MD1800 currently in production has a different door interlock system to the earlier model and can be identified from the handle which is solid and does not have the door catch release mechanism on the inside face of the handle.

Merrychef Limited,
Station Road West,
Ash Vale, Aldershot,
Hampshire, GU12 5XA
United Kingdom
Tel: +44 (0)1252 371000 Fax: +44 (0)1252 371007
Internet address: <http://www.merrychef.com>
E-mail: sales@merrychef.com or service@merrychef.com

SAFETY CODE

This manual is designed to assist engineers who have been on a recognised product familiarisation and training course run by Merrychef Limited. It has been prepared to offer technical guidance for the Merrychef MD Series Commercial Microwave Ovens.

Please remember that it is wiser **not** to attempt a service task if you are unsure of being able to complete it competently, quickly, and above all **safely**.

To avoid injury to yourself, and to protect the appliance from possible damage, please follow this Safety Code when servicing these ovens.

Before attempting to repair the oven, check it for microwave leakage.

Check that the oven is not emitting microwaves, even when supposedly not in operation.

Check that the oven is not operating continuously, whether the display indicates cooking or not.

Always discharge the HT capacitors before working on the oven using a suitably insulated 10 M Ω Resistor

Before removing the rear cover from the oven, ensure you do the following:

- Switch off the mains supply and remove the plug from the wall socket.
or
- If the oven is hard wired, ensure that the power is turned off at the isolator switch.

Note: the oven does NOT have an On/Off switch.

Upon completion of a service on an MD Series oven, or before reconnecting the appliance to the mains supply for testing, check all of the following points:

- All internal electrical connections are correct.
- All wiring insulation is correct and is not touching a sharp edge.
- All Earth connections are electrically and mechanically secure.
- All four door safety interlocks are secure and mechanically sound.
- The door operation is smooth.
- The door activates all four of the door interlock switches **in the correct order**.
- All fuse-holder safety covers are correctly fitted.

Before finishing the service call, recheck the following points:

- All of the electronics are functioning correctly, and all of the touch pads are working.
- The power output of the oven is correct (see pages 7 & 8).
- Microwave emission is below permissible limit - 5mW/cm² (see BS EN 60335-2-90:).
- Oven has correct 50mm air gap all round. Air flow should not be restricted.

Product specifications

Model Number: MD + Power + Voltage + Frequency + Country

For example: MD1800C25EX

Model MD 1800 (1000W) , 220-230V, 50Hz, Export model

Only Model MD1800 is currently manufactured

Model prefix	Model Number	Voltage	Frequency	Country
MD	750 1000 1400 1800	2 = 220-230V a.c. 4 = 230-240V a.c	5 = 50 Hz 6 = 60 Hz	UK EX = export

Power Requirements	MD 075045CUK MD1000C45UK MD1000C25EX MD1400C45UK MD1400C25EX MD1800C45UK MD1800C25EX	230-240V ac 50 Hz 13.0A Single Phase 2 Wire + Earth 230-240V ac 50 Hz 13.0A Single Phase 2 Wire + Earth 220-230V ac 50 Hz 14.2A Single Phase 2 Wire + Earth 230-240V ac 50 Hz 13.0A Single Phase 2 Wire + Earth 220-230V ac 50 Hz 14.2A Single Phase 2 Wire + Earth 230-240V ac 50 Hz 13.0A Single Phase 2 Wire + Earth 220-230V ac 50 Hz 14.2A Single Phase 2 Wire + Earth
Power Output Microwave 100%	MD0750 MD1000 MD1400 MD1800	750W (IEC 705) 1000W (IEC 705) 1400W (IEC 705) 1800W (IEC 705)
External Dimensions	Height Width Depth	335mm (Plus 50mm minimum clearance above) 510mm (Plus 50mm minimum clearance each side) 415mm (Plus 50mm clearance behind)
Internal Dimensions	Height Width Depth Capacity	210mm 330mm 330mm 23 litres (0.81 ft³)
Weight	Nett Gross packed	30kg 35kg
Construction	Cavity & Casework	304 Stainless Steel
Settings	Microwave Timer	100%, 75%, 50%, progressive Defrost Up to 9 minutes 59 seconds Up to 3 cooking stages of up to 9 minutes 59 seconds each (Programmed)

Control System	Wipe-clean touch pad operating microprocessor based control system. Direct readout of time and power set. 10 Pre-programmed cooking sequences accessed by just two key presses.
Safety Features	Four door interlock switches. Cavity Overheat Sensor. Magnetron Overheat Sensor.
Additional Features	<ul style="list-style-type: none"> • Easy-to-use multistage programming. • Manual and Pre-programmed mode always available • Magnetron soft-start circuit for increased life and faster activation. • Multiple product facility.

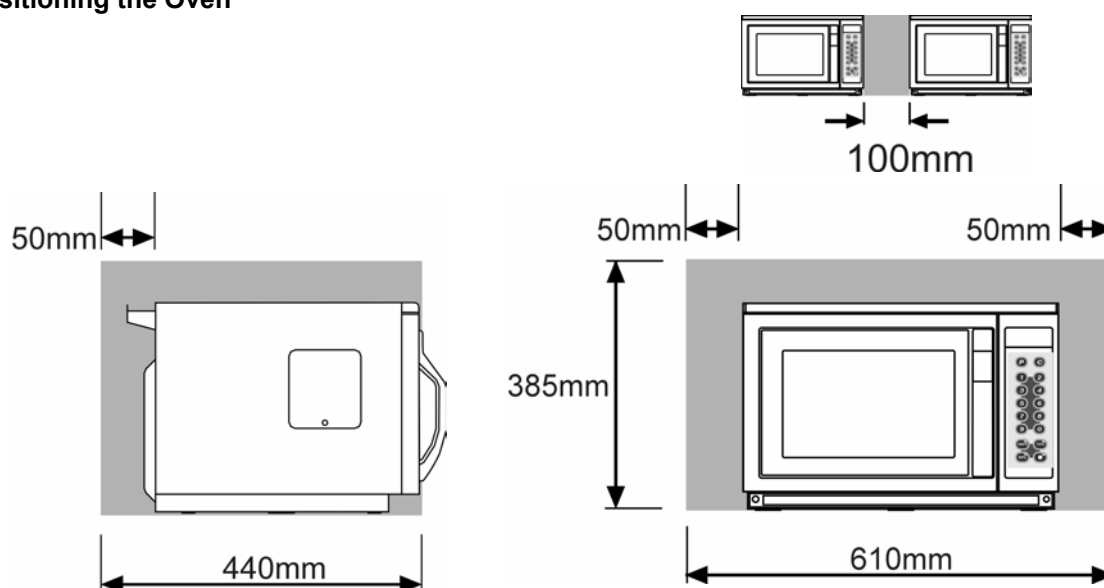
Installation instructions

Power Supply Requirements

The oven should be connected to a suitable electricity supply, which can cope with the switching-on surge that occurs with certain types of catering equipment, such as microwaves. Because of this requirement, we strongly recommend that a separate, suitably rated supply is installed for the oven.

The supply for the oven should be fitted with a **Type "C"** circuit breaker, rated at 16A.

Positioning the Oven



In order to maintain adequate ventilation for air intake and exhaust, and to allow access for cleaning filters, you must allow a minimum of 50mm clearance all around the oven. Air intake temperature should not exceed 35°C - excessive temperature can lead to reduced operating duty cycle or premature ageing of internal components.


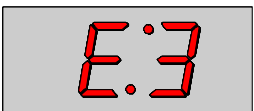
- ALWAYS** Place containers in the cavity carefully - impact damage may chip the oven shelf
- NEVER** Install an oven above fryers, grills, griddles or any other major heat source
- NEVER** Stack machines on top of each other without using the stacking adapter provided



Error codes and diagnostics

The MD series oven will identify some of the most common problems by flashing an error message code in the time display window.

These are the error messages, and suggestions for repairing them.

	1 2	Door not fully shut Possible electrical fault	Close door fully Check microswitch door circuit Check microswitch connection to PCB Check ribbon cable Check relay PCB & logic PCB
	1 2 3 4	No time has been set Invalid time has been set. Invalid program has been set Memory failure running a Program	Set a time Set a valid time Use call-back to check program Re-Program Pad, if fault repeats replace logic PCB

Procedure A - Power Output Test in accordance with BS EN 60335-2-90 Annex AA

This test is given in the BSI test standard for microwave ovens. It is reproduced below - not so that you can follow it, but to show you why it is impractical in normal conditions. A simplified procedure, which gives a good approximation to the BSI power output, is given in Procedure B which follows.

Note: This test can only be carried out on a **COLD** oven. If the oven has been operating, even for only a few seconds, the power given will be lower than the oven rating. This test must also be carried out at a stable voltage - the voltage in most kitchens varies considerably even within the period of the test. If the oven has been operating, go to **Procedure B**.

You will need:

- A thermometer capable of reading to $\pm 0.1^{\circ}\text{C}$.
- A cylindrical borosilicate glass container, 190mm diameter, with a wall thickness of 3mm or less.
- A calculator.
- A set of scales capable of reading 1kg to an accuracy of $\pm 1\text{g}$.
- A glass or plastic stirrer.
- A jug capable of holding over 1 litre of water.
- Drinkable water which is at a temperature of $10^{\circ}\text{C} \pm 1^{\circ}\text{C}$.
- A "Variac" or similar variable transformer capable of supplying the oven to ensure a stable voltage.

WARNING: *The Borosilicate Glass container has thin walls and is therefore fragile - take care not to break it during use.*

Method

A cylindrical container of borosilicate glass is used for the test. It has a maximum thickness of 3mm, an external diameter of approximately 190mm and a height of approximately 90mm. The mass of the container is determined.

At the start of the test, the oven and the empty container are at ambient temperature. Potable water having an initial temperature of $10^{\circ}\text{C} \pm 1^{\circ}\text{C}$ is used for the test. The temperature of the water is measured immediately before it is poured into the container.

A quantity of $1000\text{g} \pm 5\text{g}$ of water is added to the container and its actual mass obtained. The container is then immediately placed in the middle of the oven shelf which is in its lowest normal position. The appliance is supplied at rated voltage and operated at the maximum power setting. The time for the water temperature to attain $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ is measured. The oven is then switched off and the final water temperature is measured within 60seconds.

NOTES:

- 1 The water is stirred before its temperature is measured.
- 2 Stirring and measuring devices are to have a low heat capacity.

The microwave power output is calculated from the formula:

$$P = \frac{4.187 M_W (T_2 - T_1) + 0.55 M_C (T_2 - T_0)}{t}$$

where

- P is the microwave power output, in watts;
- M_W is the mass of the water, in grams;
- M_C is the mass of the container, in grams;
- T_0 is the ambient temperature, in $^{\circ}\text{C}$;
- T_1 is the initial temperature of the water, in $^{\circ}\text{C}$;
- T_2 is the final temperature of the water, in $^{\circ}\text{C}$;
- t is the heating time in seconds, excluding the magnetron filament heat-up time.

Procedure B - Simplified Power Test

You will need:

A thermometer capable of reading to $\pm 0.1^{\circ}\text{C}$.
A Polypropylene tray approximately 200mm x 200mm.
A measuring jug.
A calculator.
Water which is at a temperature of $10^{\circ}\text{C} \pm 2^{\circ}\text{C}$.

- 1 Measure 1 litre of cold water into the tray using the measuring jug.
- 2 Measure the water temperature, and record it as T[s].
- 3 Place the tray in the oven and close the door.
- 4 Turn the oven on.
- 5 Set the timer to 1:02.
- 6 Press the "100%" pad.
- 7 When the oven beeps, open the door and remove the tray.
- 8 Stir the water thoroughly, and measure its temperature. Record this as T[e].

Calculation:

- 1 $T[r] = T[e] - T[s]$.
- 2 $\text{Power} = 78.5 \times T[r]$. Power is in Watts.

The power given by the above test should be within $\pm 15\%$ of the rated power.

Procedure C - Power Transformer Test

You will need:

A Digital Multi-meter (D.M.M.)
A Megger or similar resistance meter using 500V d.c.
1 Isolate the oven from the mains supply.

WARNING: *High voltages and large currents are present at the secondary winding and filament winding of the Power Transformer. It is very dangerous to work near this part when the oven is on. NEVER make any voltage measurements at the High Voltage circuits, including the magnetron filament.*

WARNING: *Even when the oven is not cooking, the Power Transformer has High Voltages present because of the Soft Start circuit. Isolate the oven before testing.*

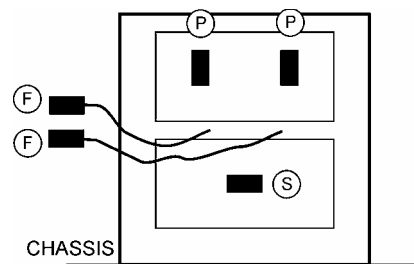
2. Ensure that the High Voltage Capacitor is discharged before commencing work.
3. Remove all connections from the Power Transformer.
4. Using a D.M.M., check the continuity of the windings. Results should be as follows:

Mains winding between tags P & P	Approx. 1.3Ω
High Voltage winding (between tag S & chassis)	Approx. 82Ω
Filament winding between terminals F & F	Less than 1Ω

5. Using a Megger, test the insulation resistance between:

Primary winding P and chassis	Pass if over $10 \text{ M}\Omega$
Filament winding F and chassis	Pass if over $10 \text{ M}\Omega$

One end of the High Voltage winding is connected to the chassis, so this is not tested.



Procedure D - High Voltage Capacitor Test

You will need: A Digital Multi-meter (D.M.M.)
A Megger or similar resistance meter using 500V d.c.

WARNING: High voltages and large currents are present at the High Voltage Capacitor. It is very dangerous to work near this part when the oven is on. **NEVER** make any voltage measurements at the High Voltage circuits, including the magnetron filament.

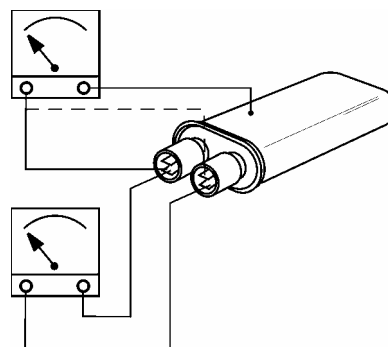
WARNING: Even when the oven is not cooking, the High Voltage Capacitor has High Voltages present because of the Soft Start circuit. Isolate the oven before testing.

1. Isolate the oven from the mains supply.
2. Ensure that the High Voltage Capacitor is discharged before commencing work.
3. Remove all connections from the High Voltage Capacitor.
4. Using a D.M.M., check for continuity between the terminals & compare results with table.

Between Terminals	Pass if approximately 10 MΩ
Between Terminals and Case	Pass if open circuit

5. Using a Megger, test the insulation resistance between the terminals and the case.

Between Terminals and Case	Pass if over 100 MΩ
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Procedure E - High Voltage Rectifier Test

You will need:

A Megger or similar resistance meter using 500V d.c.

WARNING: High voltages and large currents are present at the High Voltage Rectifier. It is very dangerous to work near this part when the oven is on. **NEVER** make any voltage measurements at the High Voltage circuits, including the magnetron filament.

WARNING: Even when the oven is not cooking, the High Voltage Rectifier has High Voltages present because of the Soft Start circuit. Isolate the oven before testing.

1. Isolate the oven from the mains supply.
2. Ensure that the High Voltage Capacitor is discharged before commencing work.
3. Remove all connections from the High Voltage Rectifier.
4. Using the Megger, test for continuity in both directions. Compare results with the table.

Open Circuit both ways	FAIL
Conducts one way only	PASS
Short Circuit both ways	FAIL
Conducts one way, leaks the other	FAIL

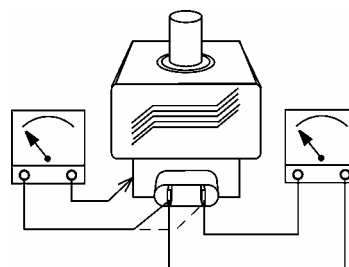
Procedure F - Magnetron Test

You will need:

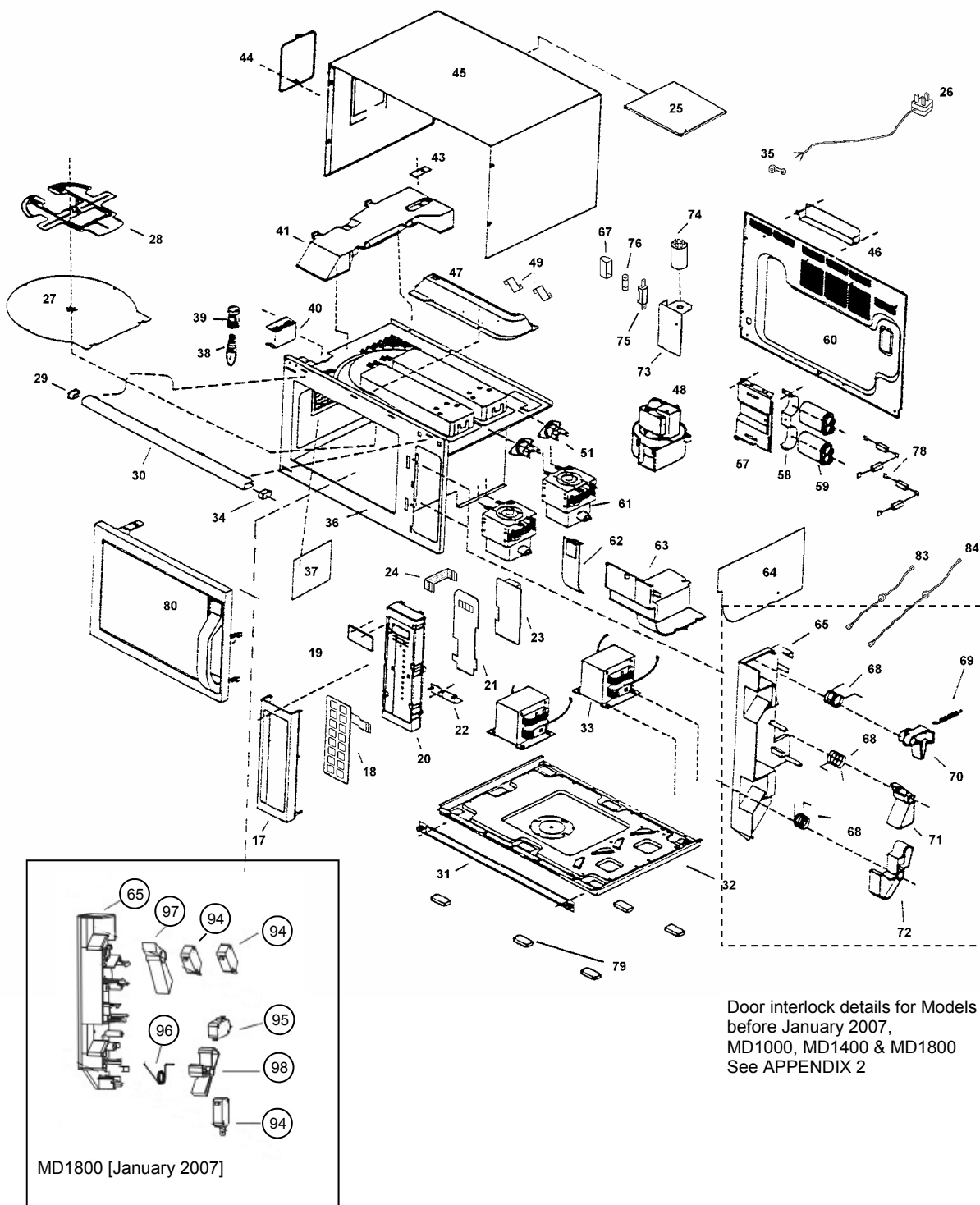
A Megger or similar resistance meter using 500V d.c.

A Magnetron can be tested for an open filament or a short circuit by carrying out a continuity check.

1. Isolate the oven from the mains supply.
2. Ensure that the High Voltage Capacitor is discharged before commencing work.
3. Remove all connections from the Magnetron.
4. A continuity check across the Filament terminals should be 1ohm or less
5. A continuity check between each filament terminal and the metal outer should read open.



Exploded view :

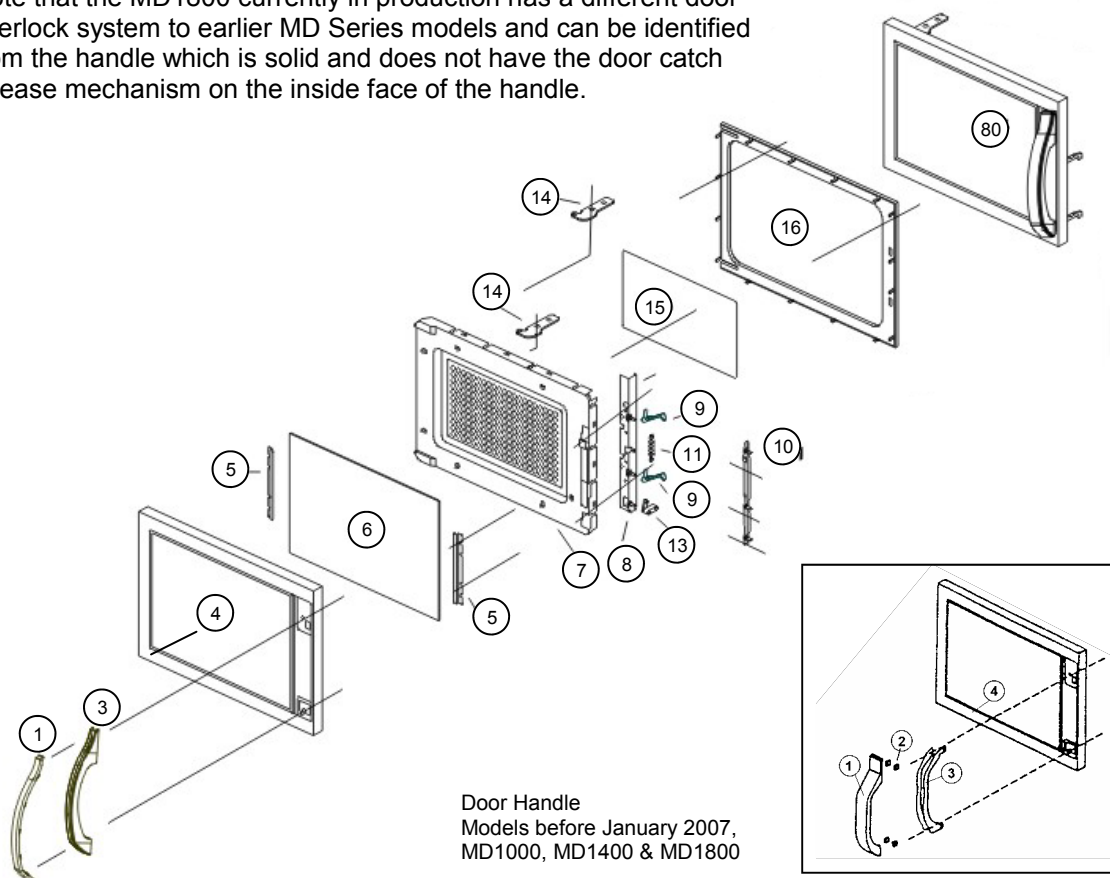


Note: Models MD0750 & MD1000 have one Magnetron Assembly only (Parts 51 & 61)

	Model	Part
59	MD0750 (Tesco)	HV Capacitor 0.74μF 30M0098 HV Capacitor 1.0μF 30M0059
51 61	MD0750 (Tesco) MD1000	1 Magnetron only

Door assembly MD-Series

Note that the MD1800 currently in production has a different door interlock system to earlier MD Series models and can be identified from the handle which is solid and does not have the door catch release mechanism on the inside face of the handle.



No	Description	MD1000, MD1400, MD1800	MD1800 From Jan 2007
1	Outer Handle	30M0001	30M4002
2	Handle Bearing (4)	30M0002	—
3	Inner Handle	30M0003	30M4003
4	Door Outer Skin	30M0004	30M0004
5	Glass Locator	30M0005	30M0005
6	Outer Door Glass	30M0006	30M0006
7	Door Body	30M0007	30M0007
8	Door Catch Bracket	30M0008	30M0008
9	Door Catch (2)	30M0009	30M4009
10	Door Catch Link Rod	30M0010	30M0010
11	Door Spring	30M0011	30M4011
13	Door Catch Crank	30M0013	30M0013
14	Upper / Lower Hinge Plate	30M0014	30M0014
15	Inner Door Film	30M0015	30M0015
16	Choke Cover	30M0016	30M0016
80	Door Assembly	11M0334	11M4334

Door replacement and door adjustment

After any service work to the door, the oven should always be checked for microwave leakage with a suitable meter

DOOR REPLACEMENT

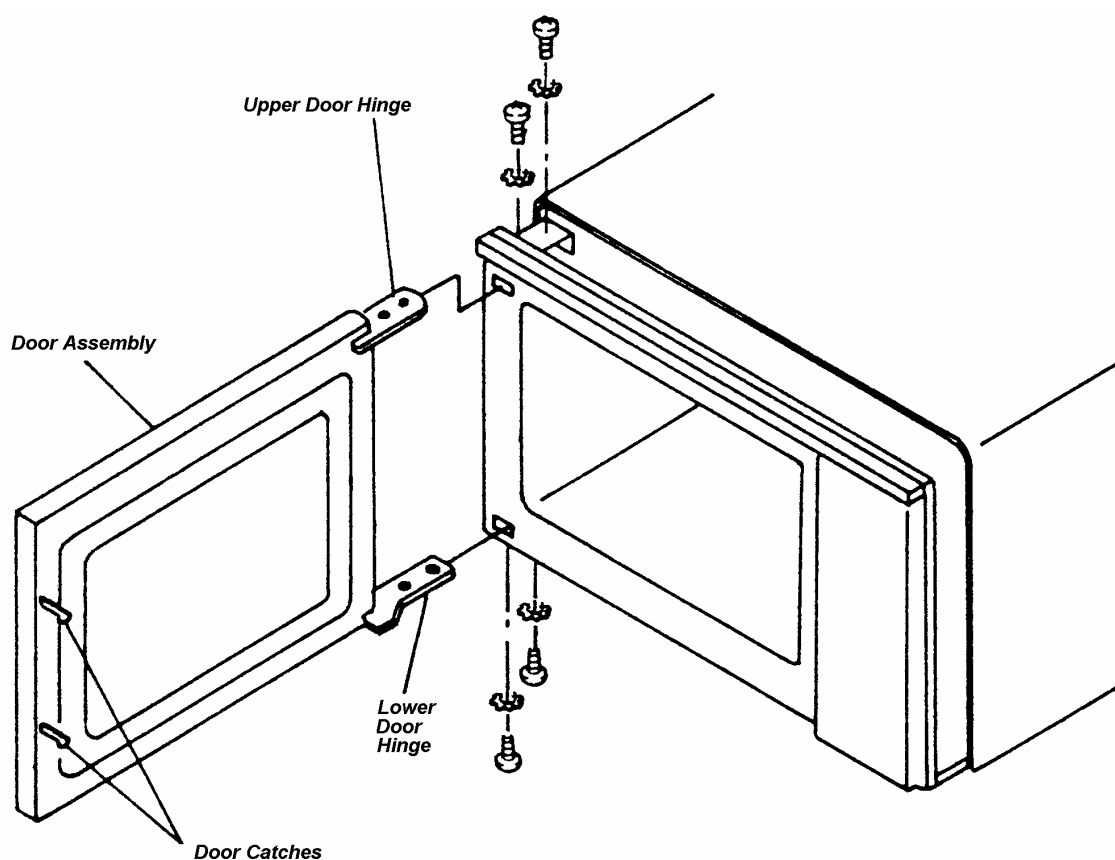
1. Remove four screws holding the Upper and Lower Hinge Plate [14] to the oven cavity.
2. Remove Door Assembly [80] by pulling it forward.
3. On re-installing new door assembly, secure the upper and lower oven hinges with the four mounting screws to the oven cavity.
4. Make sure the door is parallel with the bottom line of the oven cavity face and the catches pass through the catch holes correctly. See door adjustment.

DOOR ADJUSTMENT

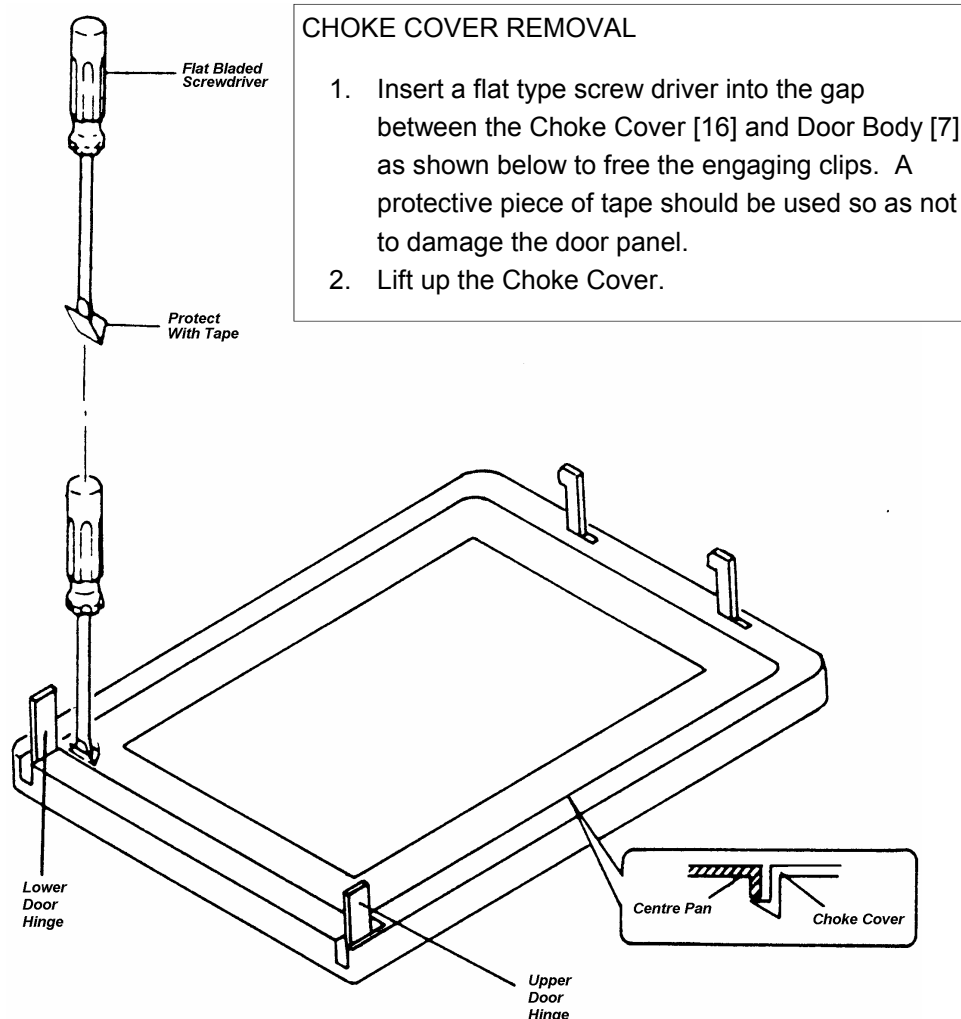
When removing and/or loosening hinges during door adjustment or replacement, the following adjustment criteria must be met. The door is adjusted to meet the following three conditions by keeping the hinge screws slack.

1. Adjust door interlock block to a position where it smoothly locates with the catches through the catch holes.
2. Deviation of door alignment from horizontal line of cavity front is to be less than 1.0mm.
3. The door is positioned so that it touches the cavity front.

Reinstall outer case and check for microwave leakage around the door with an approved microwave leakage meter



Door servicing



DOOR COMPONENTS REMOVAL

Place the Door Assembly [80] on a soft cloth with the Choke Cover [16] facing up.

UPPER AND LOWER OVEN HINGE REMOVAL

1. Remove the Choke Cover, referring to "CHOKE COVER REMOVAL".
2. Release the Door Hinges [14] from the door panel.

DOOR HANDLE REMOVAL

1. Remove the two screws holding the Door Handle [1] to door.
2. Remove the Door Handle from the Door Body.

UPPER AND LOWER DOOR CATCH REMOVAL

1. Remove the Inner Handle [3] from the door assembly.
2. Remove the three screws holding the Door Catch Bracket [8] to the Door Body.
3. Release the Door Spring [11] from the tab of the Door Catch Link Rod [10] and Door Catch Bracket.
4. Release the Catches [9] from Door Catch Link Rod and Door Catch Bracket.

DOOR OUTER SKIN REMOVAL

1. Set the four tabs of the Door Outer Skin [4] upright.
2. Remove the Door Outer Skin from the Door Body [7].

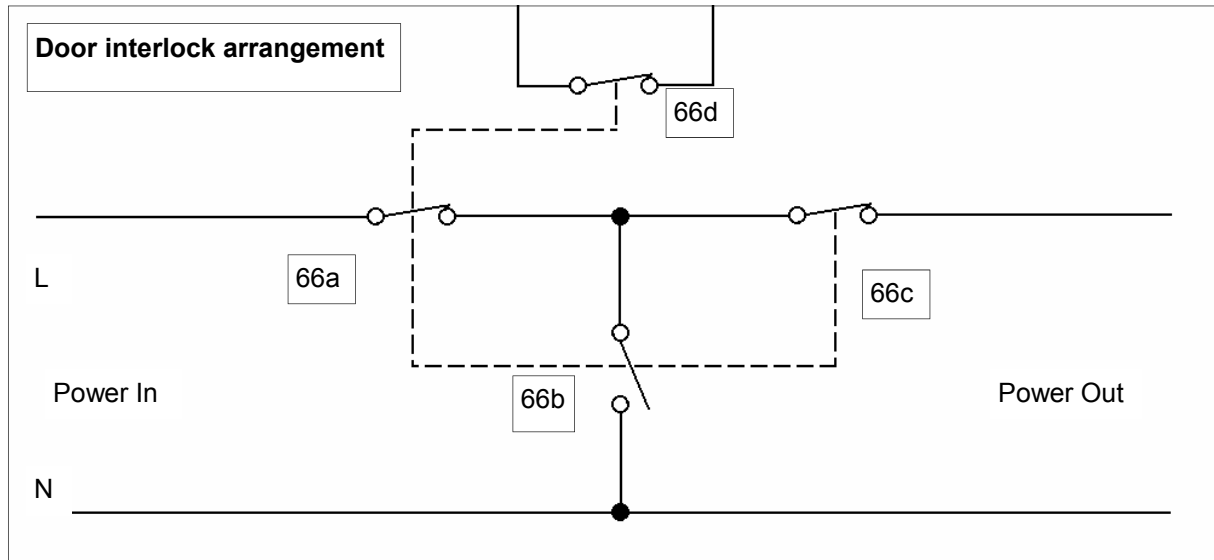
DOOR GLASS REMOVAL

1. Remove the four screws holding the two Glass Locators [5] to the Door Body [7].

Door interlock operation

Door interlock operation

The door on the oven is monitored by four microswitches. Three of these are used in the conventional “Primary, Secondary and Monitor” switch arrangement shown below, while the fourth is a low-voltage switch linked directly to the control circuitry.



The switches operate as follows:

1. Monitor Switch [66b , Top]. As the door is closed, the monitor switch is opened.
2. Primary Interlock Switch [66a , Lower Middle]. The Primary switch is then closed.
3. Secondary Interlock Switch [66c , Upper Middle]. The Secondary Switch then closes.
4. Low voltage Switch [66d , Bottom]. The Low voltage switch operates concurrently with the Primary and Secondary switches.

When the door is opened, the switches operate in the reverse order.

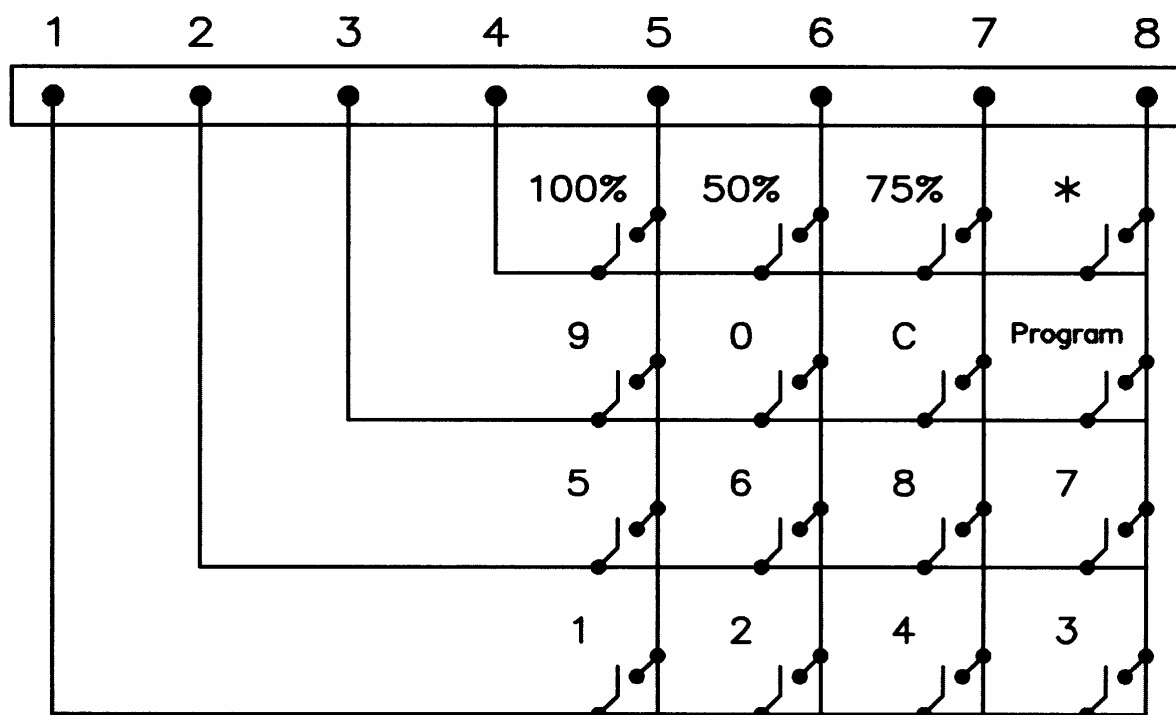
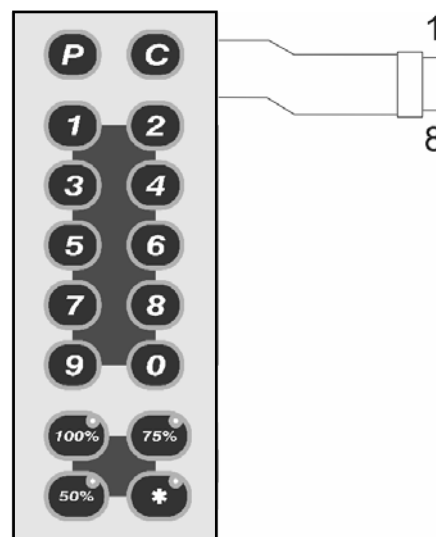
Membrane panel circuit

You will need:

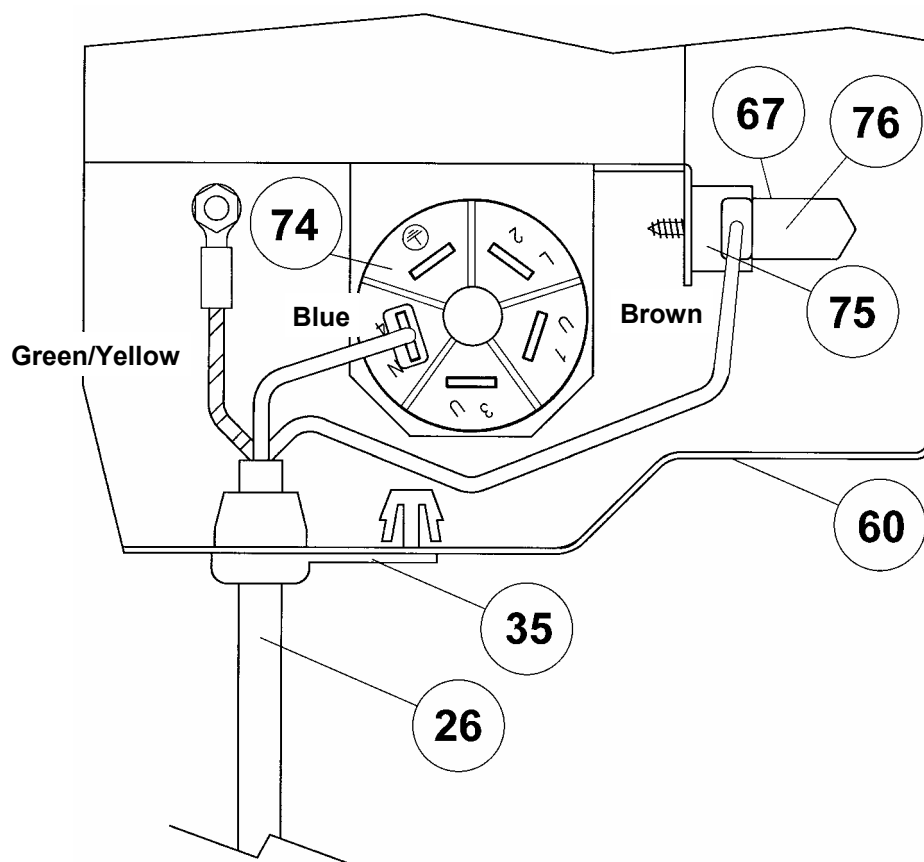
A Digital Multi-meter (D.M.M.)

Procedure:

1. Isolate the oven from the mains supply.
2. Remove the Logic Assembly from the Control Panel Housing.
3. Unplug the membrane "tail" from the Logic PCB Assembly.
4. Using a D.M.M., check for continuity between the correct terminals when the pads are pressed.
5. When the panel has been tested, re-assemble and re-test the control housing.



Input wiring details



26	Mains Cable Assy	31Z0220
35	Strain Relief Bush	31Z1036
60	Rear Panel	30M0060
67	Fuse Cover	20Z1080
74	16A Mains Filter	30Z0997
75	Fuse Holder	30Z0231
76	Fuse 13A Anti surge	30Z0168

Part number identification chart 1

No	Description	MD1000	MD1400	MD1800 Pre Jan 2007	MD1800 From Jan 2007
		Part No.	Part No.	Part No.	Part No.
1	Outer Handle	30M0001	30M0001	30M0001	30M4002
2	Handle Bearing (4)	30M0002	30M0002	30M0002	30M0002
3	Inner Handle	30M0003	30M0003	30M0003	30M4003
4	Door Outer Skin	30M0004	30M0004	30M0004	30M0004
5	Glass Locator	30M0005	30M0005	30M0005	30M0005
6	Outer Door Glass	30M0006	30M0006	30M0006	30M0006
7	Door Body	30M0007	30M0007	30M0007	30M0007
8	Door Catch Bracket	30M0008	30M0008	30M0008	30M0008
9	Door Catch (2)// Catch hook	30M0009	30M0009	30M0009	30M4009
10	Door Catch Link Rod	30M0010	30M0010	30M0010	30M0010
11	Door Spring	30M0011	30M0011	30M0011	30M4011
12	Oven Cavity	30M0012	30M0036	30M0036	30M0036
13	Door Catch Crank	30M0013	30M0013	30M0013	30M0013
14	Upper / Lower Hinge Plate	30M0014	30M0014	30M0014	30M0014
15	Inner Door Film	30M0015	30M0015	30M0015	30M0015
16	Choke Cover	30M0016	30M0016	30M0016	30M0016
17	Control Panel Cover (see note 1)	30M0017	30M0017	30M0017	30M0017
18	Membrane Blue	11M0384	11M0384	11M0384	11M0384
19	Display Screen	30M0019	30M0019	30M0019	30M0019
20	Control Housing Moulding	30M0020	30M0020	30M0020	30M0020
21	Logic PCB Assy	11M0326	11M0326	11M0326	11M0326
22	Housing Support Bracket	30M0022	30M0022	30M0022	30M0022
23	Relay PCB Assy	11M0327	11M0327	11M0327	11M0327
24	10 Way Ribbon Cable Assy	11E0081	11E0081	11E0081	11E0081
25	Insulating Sheet	30M0025	30M0025	30M0025	30M0025
26	Mains Cable Assy	31Z0220	31Z0220	31Z0220	31Z0220
27	Mica Plate and Stirrer Assembly	30M0027	30M0027	30M0027	30M0027
28					
29	Decorative Trim LH	30M0029	30M0029	30M0029	30M0029
30	Decorative Trim Top	30M0030	30M0030	30M0030	30M0030
31	Air Inlet Filter	30M0031	30M0031	30M0031	30M0031
32	Chassis	30M0032	30M0032	30M0032	30M0032
33	HV Transformer J1342	30M0035	————	————	————
	HV Transformer J1338	————	30M0033	30M0033	30M0033
34	Decorative Trim RH	30M0034	30M0034	30M0034	30M0034
35	Strain Relief Bush	31Z1036	31Z1036	31Z1036	31Z1036
37	Lamp Cover Film	30M0037	30M0037	30M0037	30M0037
38	Lamp	30M0038	30M0038	30M0038	30M0038
39	Lamp Holder	30M0039	30M0039	30M0039	30M0039
40	Lamp Bracket	30M0040	30M0040	30M0040	30M0040
41	Air Outlet Duct	30M0041	30M0041	30M0041	30M0041
42	Temp Sensor	30M0042	30M0042	30M0042	30M0042
43	Thermal Fuse	30M0043	30M0043	30M0043	30M0043

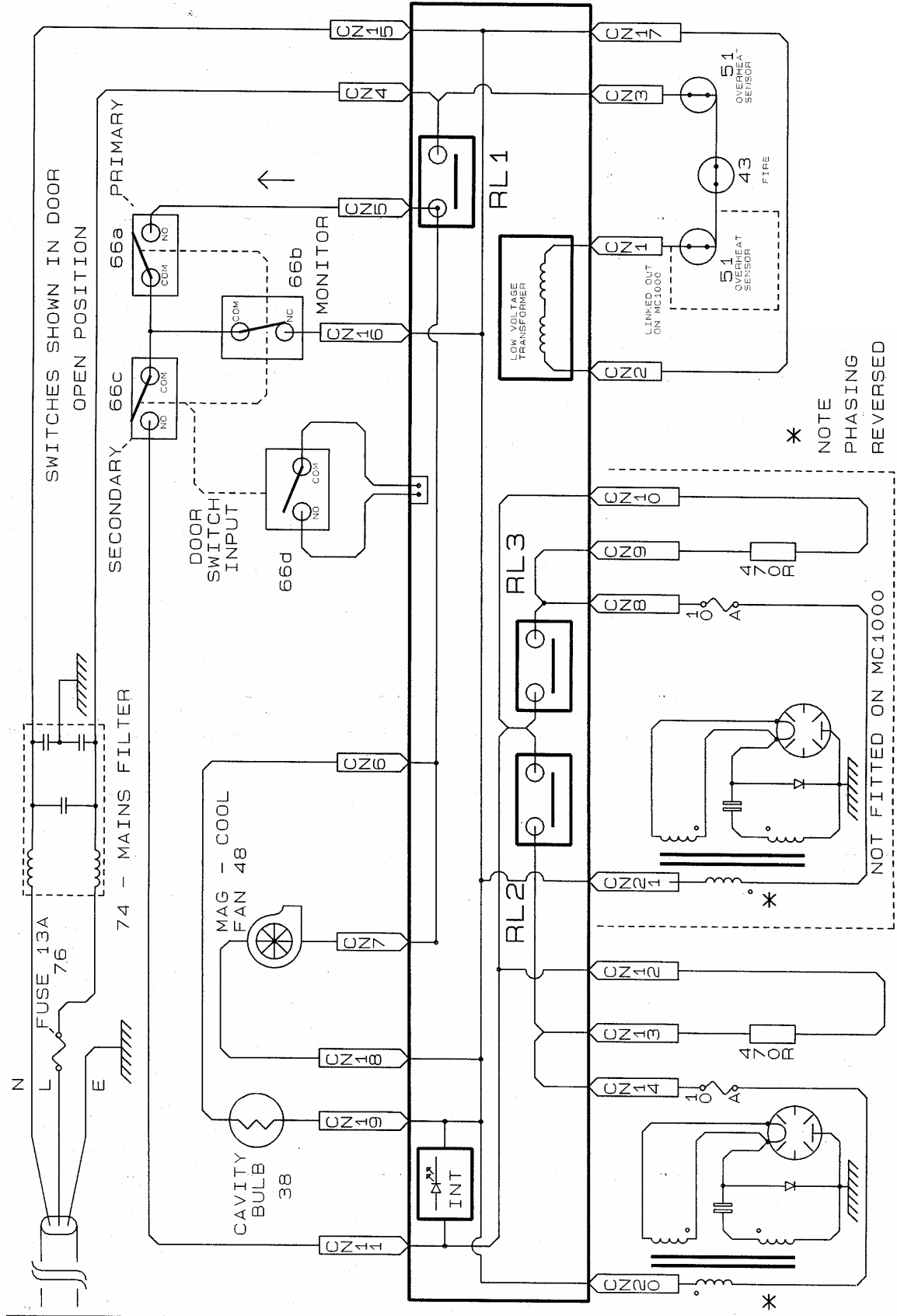
Note 1. Part 17 supplied as MD 1800, remove label for MD1000 & MD1400

Part number identification chart:

No	Description	MD1000	MD1400	MD1800 Pre Jan 2007	MD1800 From Jan
		Part No.	Part No.	Part No.	Part No.
44	Lamp Cover	30M0044	30M0044	30M0044	30M0044
45	Back Case	30M0045	30M0045	30M0045	30M0045
46	Rear Air Guide	30M0046	30M0046	30M0046	30M0046
47	Upper Air Duct	30M0047	30M0047	30M0047	30M0047
48	Cooling Fan Assembly	30M0048	30M0048	30M0048	30M0048
49	Gold Resistor	30Z0235	30Z0235	30Z0235	30Z0235
51	Magnetron Thermostat	30M0051	30M0051	30M0051	30M0051
52	10A Fuse In-line Assembly	11M0330	11M0330	11M0330	11M0330
56	Fan Scroll	30M0056	30M0056	30M0056	30M0056
57	Main Capacitor Bracket	30M0057	30M0057	30M0057	30M0057
58	Capacitor Clamp	30M0058	30M0058	30M0058	30M0058
59*	HV Capacitor 0.74µF	_____	30Z1329	_____	_____
	HV Capacitor 0.88µF	_____	30Z1075	_____	_____
	HV Capacitor 1.0µF	30M0059	_____	30M0059	30M0059
	HV Capacitor 1.1µF	_____	_____	30Z1242	30Z1242
60	Rear Panel	30M0060	30M0060	30M0060	30M0060
61	Magnetron	30M0061	30M0061	30M0061	30M0061
62	Magnetron Air Splitter	30M0062	30M0062	30M0062	30M0062
63	Magnetron Cooling Duct	30M0063	30M0063	30M0063	30M0063
64	Cooling Duct Cover	30M0064	30M0064	30M0064	30M0064
65	Interlock Holder/ switch holder	30M0065	30M0065	30M0065	30M4065
66a-d	Microswitch V5S010CB (4)	30Z1176	30Z1176	30Z1176	_____
67	Fuse Cover	20Z1080	20Z1080	20Z1080	20Z1080
68	Spring 1	30M0068	30M0068	30M0068	30M4066
69	Spring 2	30M0069	30M0069	30M0069	30M0069
70	Top Lever	30M0070	30M0070	30M0070	30M0070
71	Middle Lever/ Up lever	30M0071	30M0071	30M0071	30M4071
72	Bottom Lever/ Lower lever	30M0072	30M0072	30M0072	30M4072
73	Filter Bracket	40M0961	40M0961	40M0961	40M0961
74	16A Mains Filter	30Z0997	30Z0997	30Z0997	30Z0997
75	Fuse Holder	30Z0231	30Z0231	30Z0231	30Z0231
76	Fuse 13A Anti surge	30Z0168	30Z0168	30Z0168	30Z0168
78	HV Diode Assy	30M0078	30M0078	30M0078	30M0078
79	Self-Adhesive Foot	30M0079	30M0079	30M0079	30M0079
80	Door Assembly	11M0334	11M0334	11M0334	11M4334
82	Oven Shelf	30M0082	30M0082	30M0082	30M0082
83	HT Lead 1	30M0083	30M0083	30M0083	30M0083
84	HT Lead 2	_____	30M0084	30M0084	30M0084
91	Mains Filter Bracket	40M0961	40M0961	40M0961	40M0961
92	Filter Shell Clip	30M0092	30M0092	30M0092	30M0092
93	Filter OIN Clip	30M0093	30M0093	30M0093	30M0093
94	Microswitch	_____	_____	_____	30M4073
95	Microswitch	_____	_____	_____	30M4072
96	Spring	_____	_____	_____	30M4066
97	Top lever	_____	_____	_____	30M4071

*Note: Model 0750 (Tesco) uses: HV Capacitor 0.74µF 30M0098 & HV Capacitor 1.0µF 30M0059

Circuit diagram:



APPENDIX 1: Cleaning procedure

For the oven to operate at peak efficiency, the cavity, door and the air filter must be kept clean.

A daily cleaning routine will ensure that you comply with the required hygiene standards and will help to maintain and prolong the efficiency of your oven.

Follow the SAFETY INSTRUCTIONS at the beginning of this manual.

- **ALWAYS switch off at the electrical supply.**
- **As required, wipe out spillage's with disposable paper wipes**
- **NEVER use steel wool, knives or harsh abrasives on any part of the oven**

As with all electrical appliances, it is wise to have the electrical connections inspected periodically.

Cleaning the Air Filter

1. Remove the air filter from along the lower edge of the oven.
2. Wash in clean, warm soapy water, rinse and pat dry. Put the filter back into position.

Cleaning the oven cavity and door

1. Wipe down the sides and floor of the cavity with a damp cloth.
2. Gently wipe the ceiling. Take care not to press upwards as this could damage the stirrer cover.

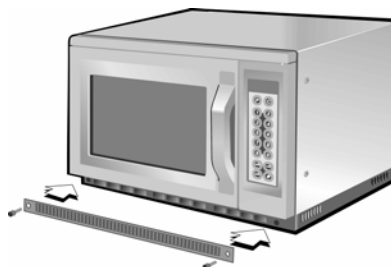
Cleaning the control panel and exterior surfaces

Wipe down regularly with a damp cloth.

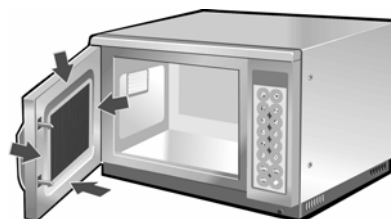
Hints and Tips for stubborn stains in the oven cavity

1. Place a container of water (1.5 litres) into the centre of the oven cavity.
2. Set timer to 9 minutes.
3. Set microwave power to 100%.
4. At end of steam cycle wipe out cavity with a clean cloth.

Faults arising from neglect or misuse including use without clean filters in place are not covered by the guarantee. Service visits as a result of such faults will be chargeable.



DO NOT USE THE OVEN WITHOUT A CLEAN AIR FILTER IN POSITION



Replacing the Light Bulb

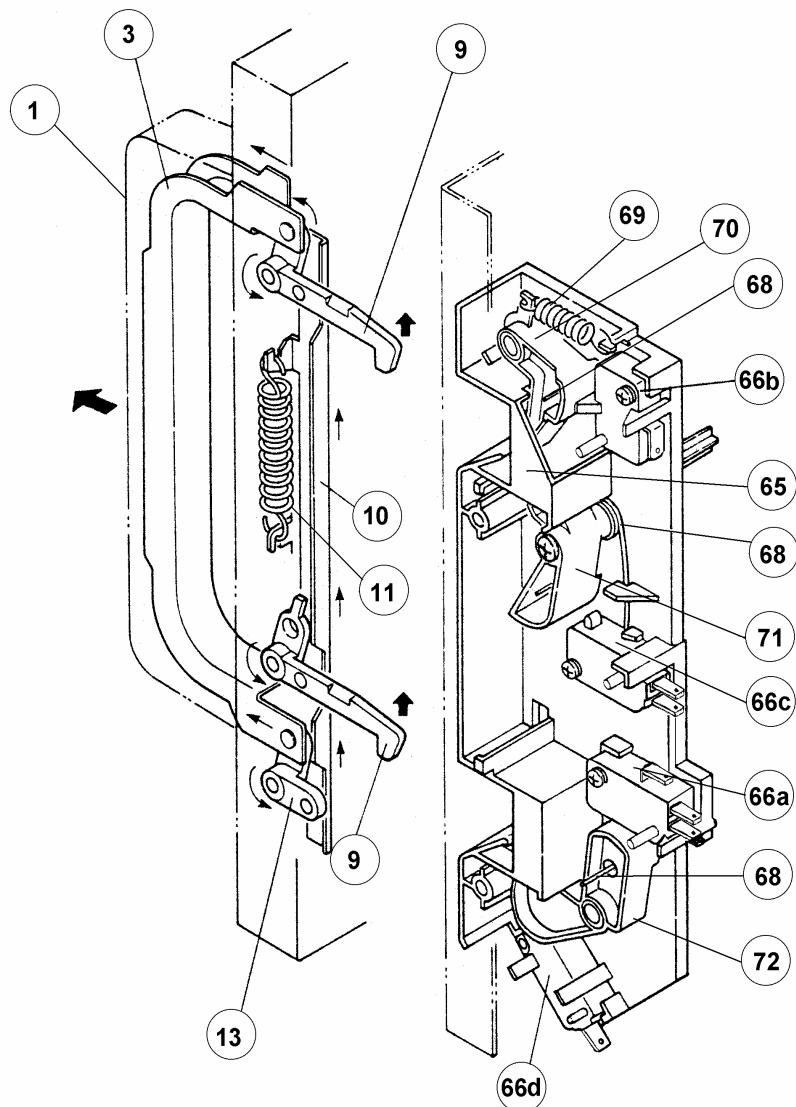
WARNING: Disconnect the oven from the electrical supply before removing the light bulb cover

- 1 Undo screw on panel on side of the oven and remove panel
- 2 Replace light bulb Part No. 33M0038 and replace panel and tighten screw.

NOTE: Light bulbs are not covered by the warranty and can be purchased by contacting Merrychef Service Dept.



APPENDIX 2: Door interlock details
Models before January 2007, MD1000, MD1400 & MD1800



No	Description	Part No.
1	Outer Handle	30M0001
3	Inner Handle	30M0003
9	Door Catch (2)	30M0009
10	Door Catch Link Rod	30M0010
11	Door Spring	30M0011
13	Door Catch Crank	30M0013
65	Interlock/ Switch Holder	30M0065
66 a-d	Microswitch V5S010CB	30Z1176
67	Fuse Cover	20Z1080
68	Spring 1	30M0068
69	Spring 2	30M0069
70	Top Lever	30M0070
71	Middle Lever	30M0071
72	Bottom Lever	30M0072

Manual corrections and modifications

Whilst every effort has been made to ensure that the information contained in this manual is accurate and complete, if you believe that an error has been made, or if you have any suggestions for how the manual could be improved, please fill in and return this form. A review of any forms returned will be made on a regular basis, and the manual will be updated if required.

Name	
Address	
Page on which error occurs- MD 1800:	
Description of error	
Suggestion for improvement to manual	
Please return this form to:	Service Department Merrychef Ltd Station Road West Ash Vale Aldershot Hampshire GU12 5XA
Or Fax it on:	+44 (0) 1252 371007
E-Mail	quality@merrychef.com