Model

AVM 215 BL

Exploded view

Circuit diagram



Service-Manual

Microwave oven AVM 215 BL

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Introduction safety

INTRODUCTION

Before leaving the factory each oven is carefully checked.

It must however, be installed and used correctly.

Despite all the steps taken to make the oven safe, the safety is dependent on the correct installation and the fact the user understands how to use and maintain the oven.

The information in this section should be used as a reminder that the oven is safe and that anyone who uses it must first read the instructions for use in order to be able to use the oven correctly and obtain best results.

SAFETY

To avoid injury to yourself and damage to the appliance always work to the following rules when servicing an oven.

Always disconnect the plug from the mains before starting work.

If there is no plug switch off the electric supply at the control box.

When you have finished servicing an oven before you reconnect it to the mains, make sure that:

- all the internal connections are correct
- the wires are insulated and not touching the door or the cabinet or anything sharp
- all the earth connections are electrically and mechanically sound
- do not modify or anyway interfere with the safety devices built-in to the oven
- make sure that each replacement part you use conforms to the manufacturer's specifications

Do not start a repair if you have any doubt as to your ability to complete it.

CAUTION - MICROWAVE RADIATION

PERSONNEL SHOULD NOT BE EXPOSED TO THE MICROWAVE ENERGY WHICH MAY RADIATE FROM THE MAGNETRON, WAVEGUIDE OR ANTENNA IF THEY ARE IMPROPERLY USED OR CONNECTED. ALL INPUT

AND OUTPUT MICROWAVE CONNECTIONS, WAVEGUIDES, FLANGES AND GASKETS MUST BE SECURE.

NEVER OPERATE THE DEVICE WITHOUT A MICROWAVE ENERGY ABSORBING LOAD ATTACHED.

NEVER LOOK INTO AN OPEN WAVEGUIDE OR ANTENNA WHILE THE DEVICE IS ENERGIZED.

NEVER OPERATE AN OVEN WITH CABINET OFF WITHOUT MEASURING THE MICROWAVE LEAKAGE

AROUND MAGNETRON AND VISIBLE MICROWAVE CONNECTIONS (WELDING JOINTS).

Do not operate the oven if the following conditions exist:

- the door does not close firmly against the door support because of the door being warped or the hinges damaged.
- The door trims or seals are damaged.
- If there is any visible damage to the oven.
- if the door does not close properly.

Avoid operating the oven if known components in the interlock system, oven door or microwave generating assembly are known defective. They must be replaced.

WARNING - HIGH VOLTAGE

IT IS POSSIBLE TO COME IN CONTACT WITH LETHAL HIGH VOLTAGE WHEN WORKING WITH HV TRANSFORMER, HV CAPACITOR AND MAGNETRON. THEREFORE NEVER TRY TO MEASURE THE HIGH VOLTAGE. ALWAYS TAKE UTMOST CARE WHEN PERFORMING ELECTRIC MEASUREMENTS INSIDE THE OVEN.

Technical data

Dimensions of cabinet

Height	330	mm
Width	553	mm
Depth	477	mm

Dimensions of cavity

Height	227	mm
Width	372	mm
Depth	395	mm
Cavity volume	34	I
Turntable diameter	360	mm

Weight

Net	23	Kg
Packed	26	Kg

Electrical

Voltage	220-24	0 V
Frequency	50	Hz
Power consumption	2850	W
Power consump. CH/DK	2300	W
Power consump.	12,6	Α
Power consump.CH/DK	10	Α
Fuse	Eu 16	Α
Fuse CH/DK	10	Α
	UK 13	Α

Power

Output power	950 +/-	60 W
Microwave frequency	2450	MHz

Grill

Quarzgrill	1200	W

Timer

Digital	90	min
Didital	90	min

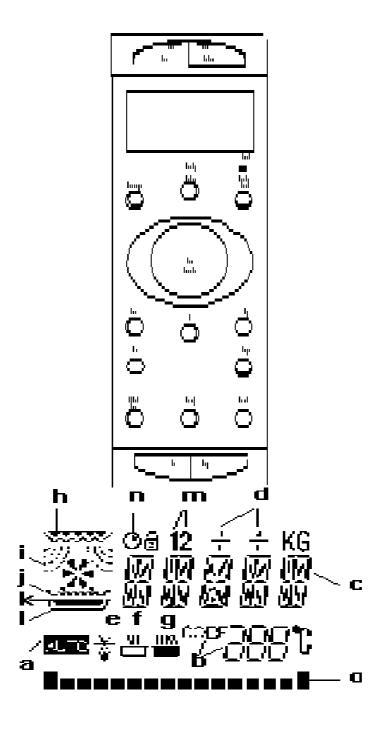
Accessories

Grill grid, Spacer, Crisp plate

Text/Legend

Functional Description

Control panel layout



Display symbols description

- a) "AUTO" is lit when auto defrost, auto reheat, beverage or auto crisp is selected.
- b) "CODE", together with a number, is lit when auto crisp reheat or auto crisp cook is selected. The number indicates food class.
- c) "SENSE" is displayed when an auto function is started.
- d) Personal preference for the auto functions is indicated by "--", "-", "+", "++". When no personal preference is choosen, all are turned off.
- e) The defrost symbol is lit during manual or auto defrost.
- f) The reheat symbol is lit when Auto Reheat or Auto Crisp Reheat is selected.
- g) The cook symbol is lit when Auto Crisp Cook is selected.
- h) The grill symbol is lit when a function using the grill element is selected. The lower part of the symbol blinks during cooking.
- i) The MW symbols are lit when a function using microwaves is selected.
- j) The defrost grid symbol is lit when Auto Defrost is selected, indicating that the defrost grid must be used.
- k) The pan symbol is lit when a crisp function is selected, indicating that the crisp pan must be used.
- I) The plate symbol is lit when a cooking function is selected, indicating that the turn table must be used.
- m)The stage indicators are lit during stage cooking.
- n The timer symbol is lit when the independent timer is displayed. It blinks when the timer operates in the background.
- o) The process/power bar indicates how far the process has advanced when using the auto functions. 1000W MW is indicated by a rolling bar.

Calibration

Before the oven can be operated, a calibration must be performed. To start a calibration, make sure that a cross and a glass turn-table are mounted in the oven. A weight of 200 g must be placed on the centre of the turn-table. Enter test mode and press START. The cavity light will go on, the turn-table will start rotating and "CAL" will be displayed. After approximately 30 seconds a number will be displayed. This is the calibration factor. Check that the number is within specified limits. Press START to store the factor. If STORE is displayed, the factor has been stored successfully. Otherwise "ERR 8" will be displayed

Calibration factors should be between 170 - 194.

Real time clock

Time is set by pressing the CLOCK button. Set the hours with the timer knob. Press the CLOCK button again and set the minutes with the timer knob. Finally, press the CLOCK button again to clear the seconds and start the clock.

Cooking time

The cooking time is set with the timer knob. The maximum cooking time that can be set is 99 minutes.

Microwave power

To adjust the microwave power, press the POWER button. The current power level is displayed in Watts for 2 seconds. The power level is stepped with the POWER button, while the power level is displayed. If POWER is pressed when the oven is in stand by, the power level is set to 750 W. The oven is started with the START button.



JET

If the oven is in stand by and the START button is pressed, cooking is started immediately at full power. If the oven is already cooking, the timer is incremented 30 seconds each time the button is pressed, but the power setting is not affected.

Auto Defrost

Press the AUTO DEFROST button. Adjust doneness during the first 20 seconds with the timer knob. After a while the display shows the estimated defrost time, which is decreased during operation. The process bar indicates how far the process has advanced.

Auto Reheat

Press the AUTO REHEAT button. Adjust doneness during the first 20 seconds with the timer knob. After a while the display shows the estimated reheat time, which is decreased during operation. The process bar indicates how far the process has advanced.

Beverage

Press the BEVERAGE button. Adjust doneness during the first 20 seconds with the timer knob. After a while the display shows the estimated reheat time, which is decreased during operation. The process bar indicates how far the process has advanced.

Auto Crisp Reheat

Press the AUTO CRISP REHEAT button. Select food class by repeatedly pressing this button. Adjust doneness with the timer knob. Start by pressing the START button After a while the display shows the estimated reheat time, which is decreased during operation. The process bar indicates how far the process has advanced.

- 1 Auto Crisp Reheat Potato Products
- 2 Auto Crisp Reheat Pizza
- 3 Auto Crisp Reheat Pie/Quiche
- 4 Auto Crisp Reheat Chicken Parts
- 5 Auto Crisp Reheat Refresh Bread

Auto Crisp Cook

Press the AUTO CRISP COOK button. Select food class by repeatedly pressing this button. Adjust doneness with the timer knob. Start by pressing the START button After a while the display shows the estimated reheat time, which is decreased during operation. The process bar indicates how far the process has advanced.

- 1 Auto Crisp Cook Pizza
- 2 Auto Crisp Cook Chicken Parts

Crisp

Select crisp by pressing the CRISP button. Set the cooking time with timer knob and start with the START button.

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Grill

Use the GRILL button to select grill operation. Set the cooking time with timer knob and start with the START button.

NOTE: - When the Crisp or Grill function is selected, grill indicator 1 is lit. When cooking is started, grill indicator 2 blinks.

Timer

The TIMER button starts the independent timer. The timer is initiated to 5 s, the timer symbol is displayed (not blinking). Display of the timer is toggled with the same button. (If the timer has been started there is a display time out of 3 s). The timer is set with the timer knob and started with the START button. 3 seconds after the timer has been started, the function that was already activated is displayed, and the timer symbol blinks. If the oven is in stand-by, the timer display continues (without blink). The possible time that can be set ranges from 5 s to 9 hours and 59 minutes. Eight fast beeps indicates that the timer has counted down to zero. If the timer has been started, it can be turned off by turning the time to zero, or by pressing the STOP button when the timer is displayed.

Stage

Two stages may be stored. The following functions are excluded:

- the Independent Timer
- Auto Defrost
- Auto Reheat
- Beverage
- Auto Defrost-Reheat
- Auto Crisp Reheat
- Auto Crisp Cook

Stage is used according to the following (starting from stand by):

- a) Press STAGE. The "1" symbol is displayed. Initiate MW 750W, 5s.
- b) Select function (if other than MW), power, time etc. for stage 1. (Grill selects grill mode, not combination)
- c) Press STAGE. The setting above is stored in stage 1. The "2" symbol is displayed. Initiate MW 750W, 0s (shows clearly that a new stage is displayed).
- d) Select function etc. for stage 2.
- e) Press STAGE. Stage 2 is stored, and stage 1 is displayed. The "1" symbol is displayed. START may be pressed directly instead.

Memories

Programming:

Select function, time, power etc. to be stored. Then press a memory button (2 s) until storage is confirmed by a beep. The timer may be stored if it has not been started and no other function is active in the background (stand-by).

Fetch from memory:

Press the desired memory button, and release it within 2 s. (If the oven is in stand by, the memory contents are displayed immediately when the button is pressed).

When the oven is in operation the memories are not available.

There are no limitations when storing auto functions.

Add a little bit more

The aim of this function is to "add a little bit more" at the end of, or after, a cooking session. Every time a new cooking sessions started, the time for the process is being measured. (Changing between MW, combination and grill does not reset this timer). A certain part of the measured time is added to the remaining running time when ADD is pressed. The "Add" time is kept for 1 minute after the oven has entered stand by. If ADD is pressed within this time, the "add" time and the function and power that was last used is recalled. (For the auto functions, the corresponding manual function is used.). The minimum add time is always 5 seconds, except for crisp, where it is 30 seconds (due to heating of the crisp plate).

Stop

The STOP button aborts any operation started, and returns the oven to stand-by.

Spare part list

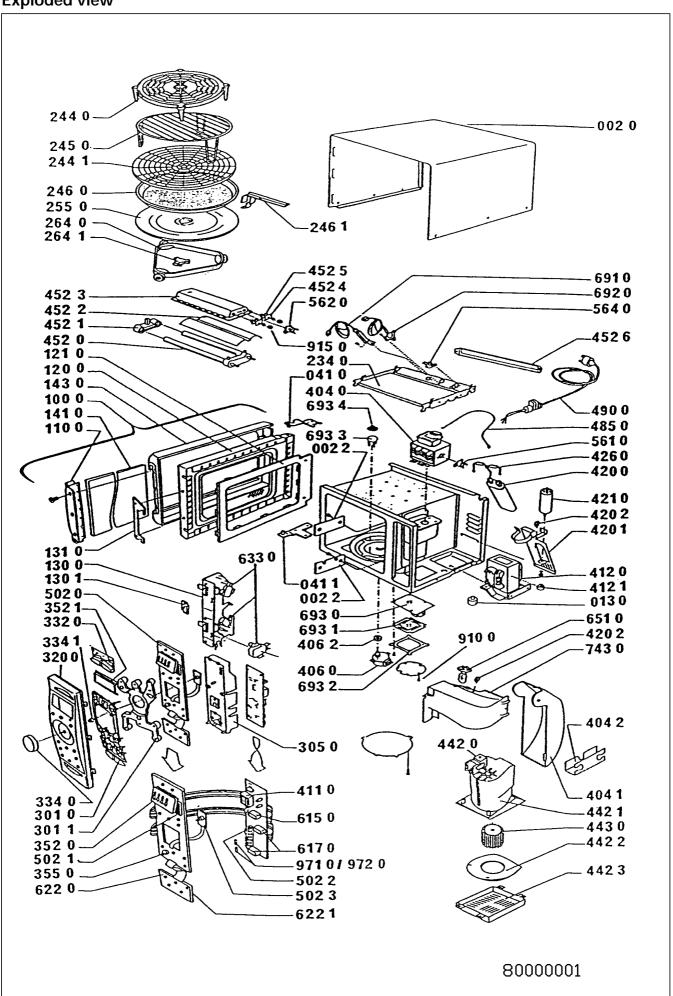
 Model
 AVM 215 BL

 Service No.
 853821512491

 Version
 853821512491

Pos. No.					
	. 12NC Code	Description	Pos. No.	12NC Code	Description
002 0	4819 442 38007	Cabinet BL	421 0	4819 121 18162	Filter, mains
002 2	4819 462 79721	Cover upper	426 0	4819 218 38039	Diode HV
002 2	4819 462 79722	Cover lower	442 0	4819 361 18361	Motor Blower
013 0	4819 462 79423	Foot	442 1	4819 462 58145	Cover fan
041 0	4819 417 19384	Hinge upper	442 2	4819 462 58146	Container fan
041 1	4819 417 19379	Hinge,lower	442 3	4819 466 98922	Casing
100 0	4819 442 38245	Door cpl. BL	443 0	4819 515 28224	Fan wheel
110 0	4819 498 69967	Grip WH	452 0	4819 259 98385	Heating element quarz
120 0	4819 442 38004	Door,inner	452 1	4819 404 78841	Holder quarz tube
121 0	4819 459 48662	Frame,breaker inner	452 2	4819 458 58522	Reflector quartz tube
130 0	4819 276 38338	Unit,pushbutton	452 3	4819 418 79082	Cover bar
130 1	4819 466 89172	Clip	452 4	4819 532 58263	Washer
131 0	4819 535 98529	Door latch	452 5	4819 532 58262	Washer ceramic
141 0	4819 450 69884	Oven glass BL	452 6	4819 458 58527	Air guide grill
143 0	4819 459 48664	Frame,breaker BL	485 0	4819 321 18253	Cable,HT
234 0	4819 325 18056	Plate, protect.	490 0	4819 321 18231	Cable,mains cpl. with clamp
244 0	4819 466 98789	Stand plastic	502 0	4819 214 78481	Control unit
244 1	4819 458 58562	Grid defrost	502 1	4819 209 88046	Microprocessor
245 0	4819 458 19981	Grid	502 2	4819 113 88001	Resistor 100 Ohm
246 0	4819 418 38353	Crisp plate	502 3	4819 101 48142	Potentiometer
246 1	4819 498 69875	Grip crispplate	502 4	4819 130 98002	Coupler,photo not shown
255 0	4819 466 78348	Turntable glass	561 0	4819 282 48247	Thermostat magnetron 145 C
264 0	4819 520 18029	Ring,set	562 0	4819 282 48277	Thermostat 160C
264 1	4819 462 38767	Rail	564 0	4819 282 48275	Thermostat 165C
301 0	4819 462 38751	Frame pushbuttons	615 0	4819 280 68319	Relay
301 1	4819 276 38329	Unit,pushbutton BL	617 0	4819 280 68323	Relay 24V
305 0	4819 404 78937	Holder	622 0	4819 276 18273	Switch
320 0	4819 453 49998	Control panel BL	622 1	4819 276 58011	Switch 5-switch assy
332 0	4819 413 98011	Button,push	633 0	4819 271 38145	Microswitch
334 0	4819 412 58412	Knob BL	651 0	4819 134 28029	Lamp cavity
334 1	4819 413 38126	Clip Knob inner	691 0	4819 210 78076	Sensor
352 0	4819 130 38076	Display	692 0	4819 210 78078	Sensor humi
352 1	4819 450 69808	Pane for Display	693 0	4819 210 78077	Sensor weight electronics
355 0	4819 280 18019	Buzzer	693 1	4819 466 89228	Plate
404 0	4819 131 58019	Magnetron	693 2	4819 462 58153	Rail
404 1	4819 462 38742	Air guide magnetron	693 3	4819 410 28735	Button,push
404 2	4819 325 18055	Plate, protect.	693 4	4819 360 48018	Membrane
406 0	4819 361 18381	Motor	743 0	4819 462 38749	Air guide
406 2	4819 532 68686	Gasket ring	910 0	4819 502 18371	Screw
411 0	4819 148 68081	Transformer	912 0	4812 502 18374	Screw not shown
	4819 145 78168	Transformer HT	912 1	4819 502 18376	Screw not shown
412 0					
412 0 412 1	4819 462 48431	Damper	912 2	4819 502 18377	Screw not shown
412 1 420 0	4819 462 48431 4819 121 48016	Damper Capacitor HT	912 2 915 0	4819 502 18377 4819 505 18248	Screw not shown Nut
412 1					

Exploded view



Circuit diagram