

05/2013

Mod: **CM1529**

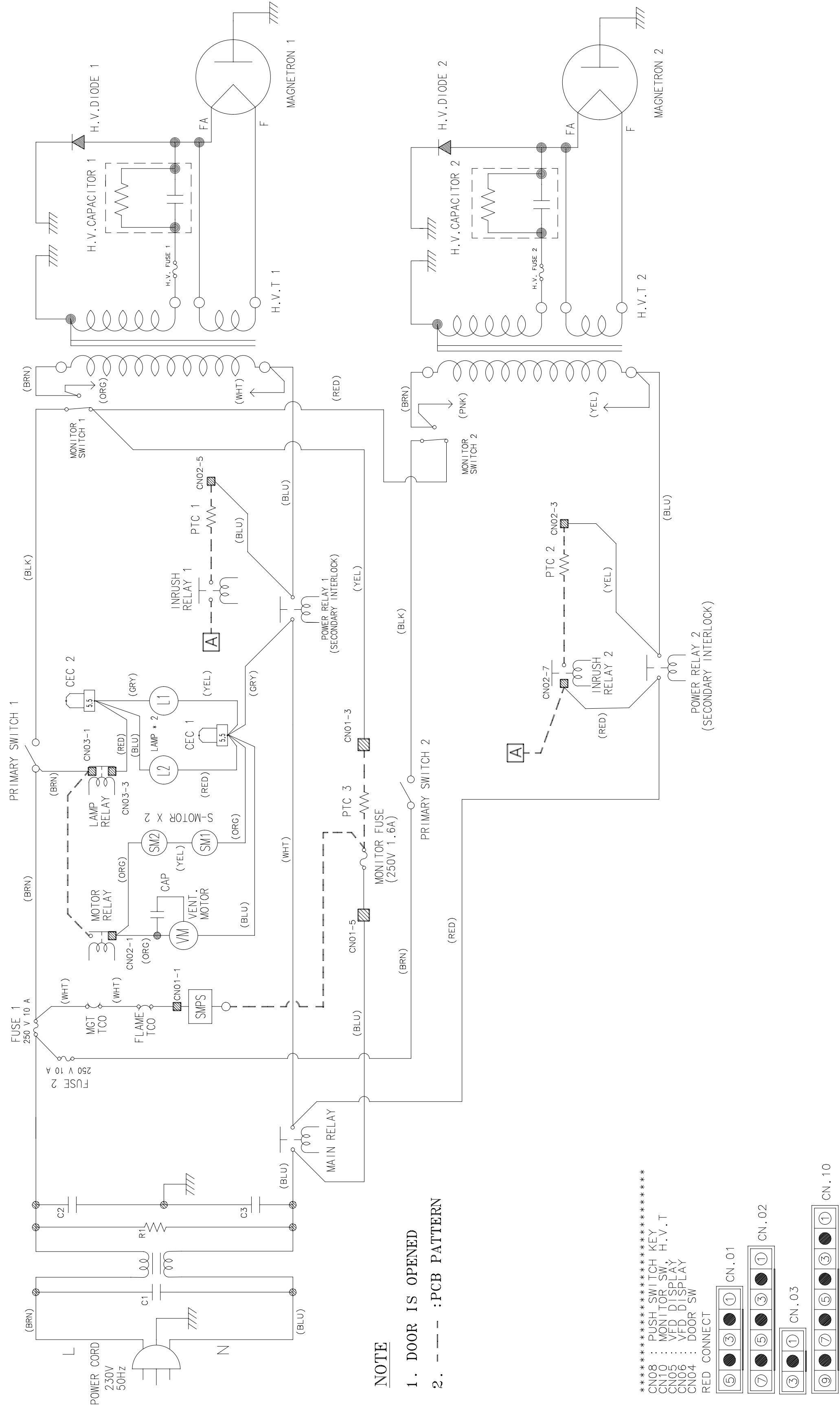
Production code: **CM-1529A**



Diamond
catering equipment

10-1 Wiring Diagrams

(This Document can not be used without Samsung's authorization)



10-2 Description of Operating Sequence

When the oven is set to power level of 100%, 70% or 50%

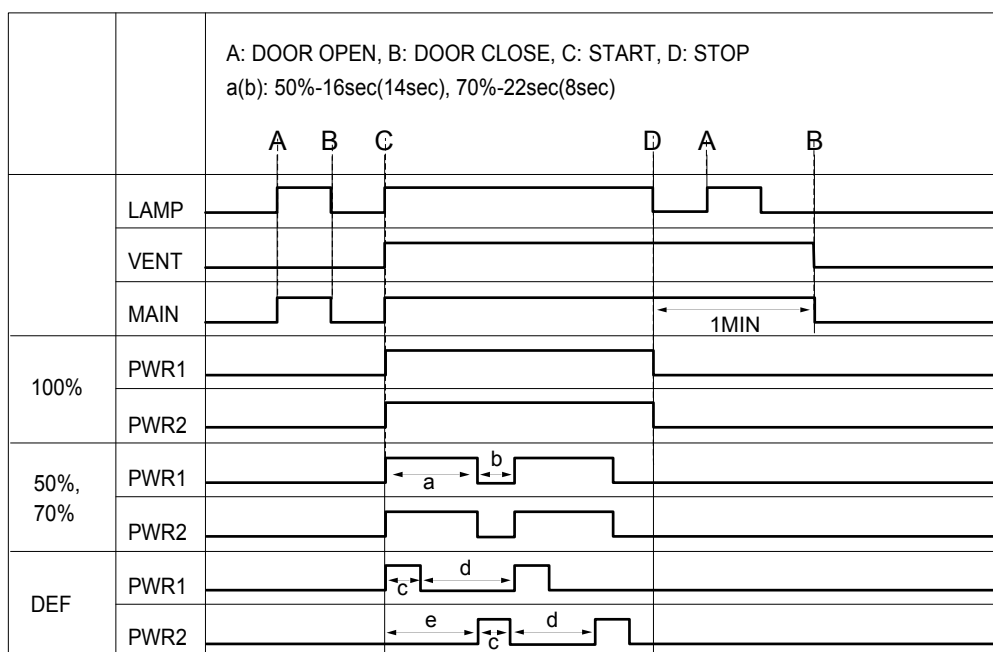
When the oven is operating under the power level of 100%, 70% or 50%, the coil of power relay 1 and 2 are energized intermittently by ON and OFF cycle of 30 seconds in order to supply power source to the High Voltage Transformer and thus to oscillate the magnetron.

When the oven is set to DEFROST power position

When the oven is set to DEFROST power position, the coil of power relay 1 and 2 is programmed to operate not together but alternately. That means power relay 1 should not work when the power relay 2 does (or relay 2 should not work when the power relay 1 does). The power relay 1 is energized for 15 seconds and then the power relay 2 is energized for 15 seconds in turn. One complete ON and OFF cycle time of the power relay 1 and 2 is 30 seconds.

The relation between indications on the display window and the output power of the microwave oven is as shown in figure below.

CM1519/CM1529	
c(d):	20%→opt open-7sec(8sec) 10%→opt open-4sec(11sec)
e :	15 sec
Note : One second included as a time for starting the magnetron oscillation	



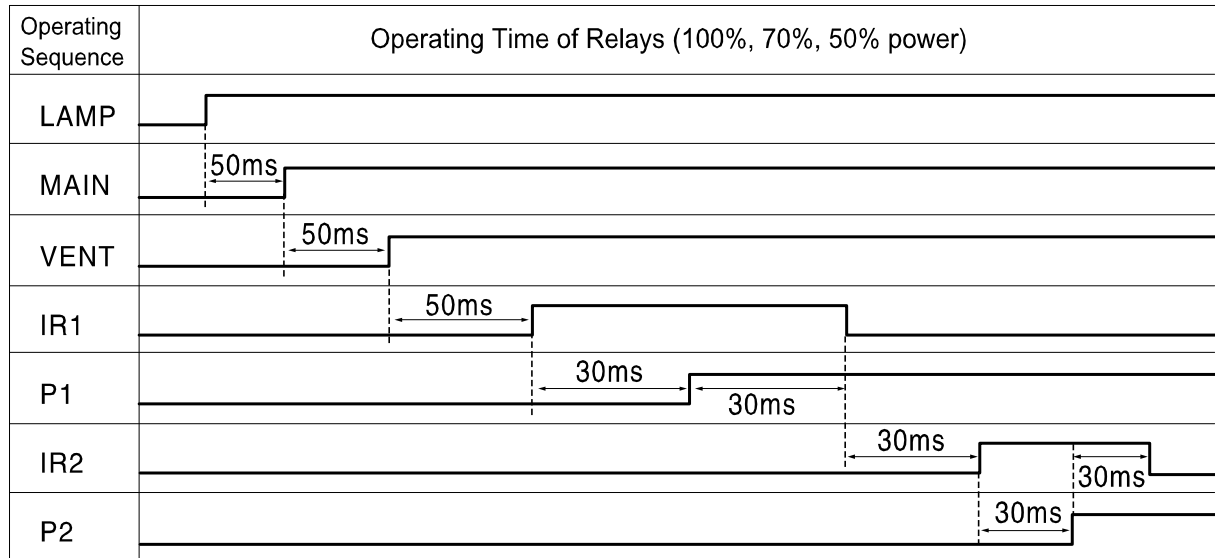
10. Wiring Diagram and Operating Sequence

10-2 Description of Operating Sequence(Continued)

Initial operating status of Power Relay when the START button is pressed.

Relays are designed to work as shown in the figure below.

When the oven is set to DEFROST power position, Inrush Relay1 and Power Relay1 are programmed to work with Inrush Relay2 and Power Relay2 not simultaneously but alternately.



- NOTE :
- LAMP: Lamp Relay (250V 5A)
 - MAIN: Main Relay (250V 16A)
 - VENT: Ventilation Motor Relay (250V 5A)
 - IR1: Inrush Relay1 (250V 5A)
 - IR2: Inrush Relay2 (250V 5A)
 - P1: Power Relay1 (250V 16A)
 - P2: Power Relay2 (250V 16A)

10. Wiring Diagram and Operating Sequence

10-2 Description of Operating Sequence(Continued)

High Voltage Transformer input power sensing circuitry

Refers to the circuitry that detects and check if the input power is correctly supplied to the primary terminal of High Voltage Transformer when the microwave oven is operating. If any abnormal condition(eg. Micro S/W, Relay open) is detected, the error code (E41, E42) shows on the display window. When the error code appears in the display window, check the wave form(A), (B), (C),or (D).

In case of Power Relay 1 (RY2), check the wave form (A), (B) below.

In case of Power Relay 2 (RY5), check the wave form (C), (D) below.

