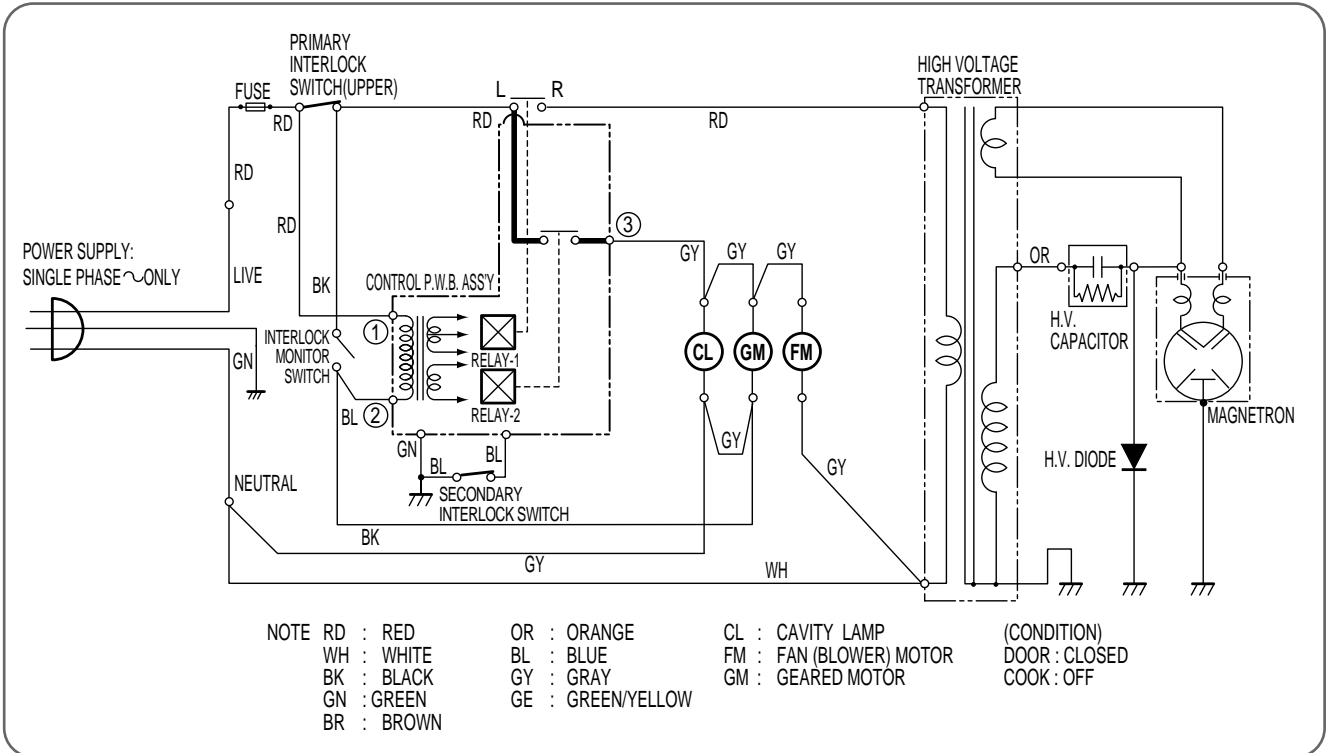


WIRING DIAGRAM

0A TYPE



1A TYPE

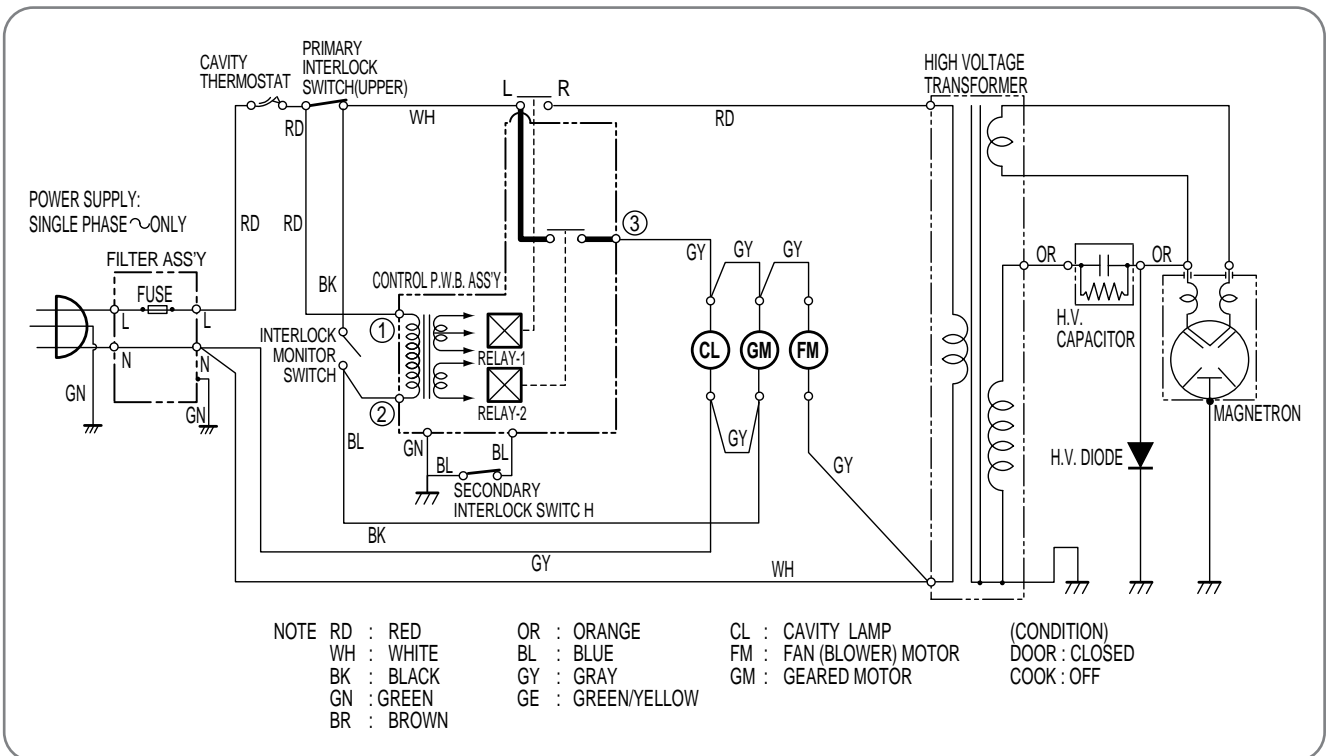


Fig. 1

OPERATION DESCRIPTION

Refer to the “WIRING DIAGRAM” (Fig. 1) on page 21.

MICROWAVE COOKING

TIME COOKING

1. When the food is placed inside the oven and door is closed.

- 1) The low voltage transformer supplies the necessary voltage to the touch control circuit when the power cord is plugged in.
- 2) The contacts of the interlock monitor switch open.
This switch creates short circuit to blow 20A fuse and stop magnetron oscillation when door is opened during operation under abnormal condition (i.e. the contacts of primary interlock switch do not open the circuit).
- 3) The contacts of primary interlock switch close the primary circuit.

2. When cooking cycle, power and time are set by touching the function pads and the desired numerical pads.

- 1) The function indicating bars are located on the digitron light to indicate that function have been set.
- 2) The time you set appears in the display window.
- 3) The touch control circuit memorizes the cooking program you set.

3. When the start button is touched.

* The RELAY “1”, “2” are controlled by the touch control circuit.

- 1) 120VAC is applied to the high voltage transformer through the contacts of RELAY “1”(See Fig.1)
- 2) Fan motor starts rotating and cools the magnetron by blowing the air coming from the intake on the rear plate hole.
- 3) The oven lamp light the inside of the oven.
- 4) Indicator light turns on to indicate function operation. Cooking time starts count down.
- 5) 3.3 Volts AC is generated from the filament winding of the high voltage transformer. This filament voltage is applied to the magnetron to heat the magnetron filament through two noise preventing choke coils.
- 6) A high voltage of 2000 Volts AC is generated in the secondary of high voltage transformer and this secondary voltage is increased by the action of the diode and the charging of the high voltage capacitor. This resultant DC voltage is then applied to the anode of the magnetron. As shown in Fig. 2 the first half cycle of the high voltage produced in the high voltage transformer secondary charges the high voltage capacitor. Current flow is in the direction of the dotted-line during the second half cycle, the voltage produced by the transformer secondary, and the charge of the high voltage capacitor are combined and applied to the magnetron as shown by the solid line so that oscillations begin. The disturbance wave generated by the magnetron is prevented by the choke coils of 3.2 μ H, filter capacitors of 16 μ F and the magnetron's shielded case so that TV and radio programs are not impaired by noise.

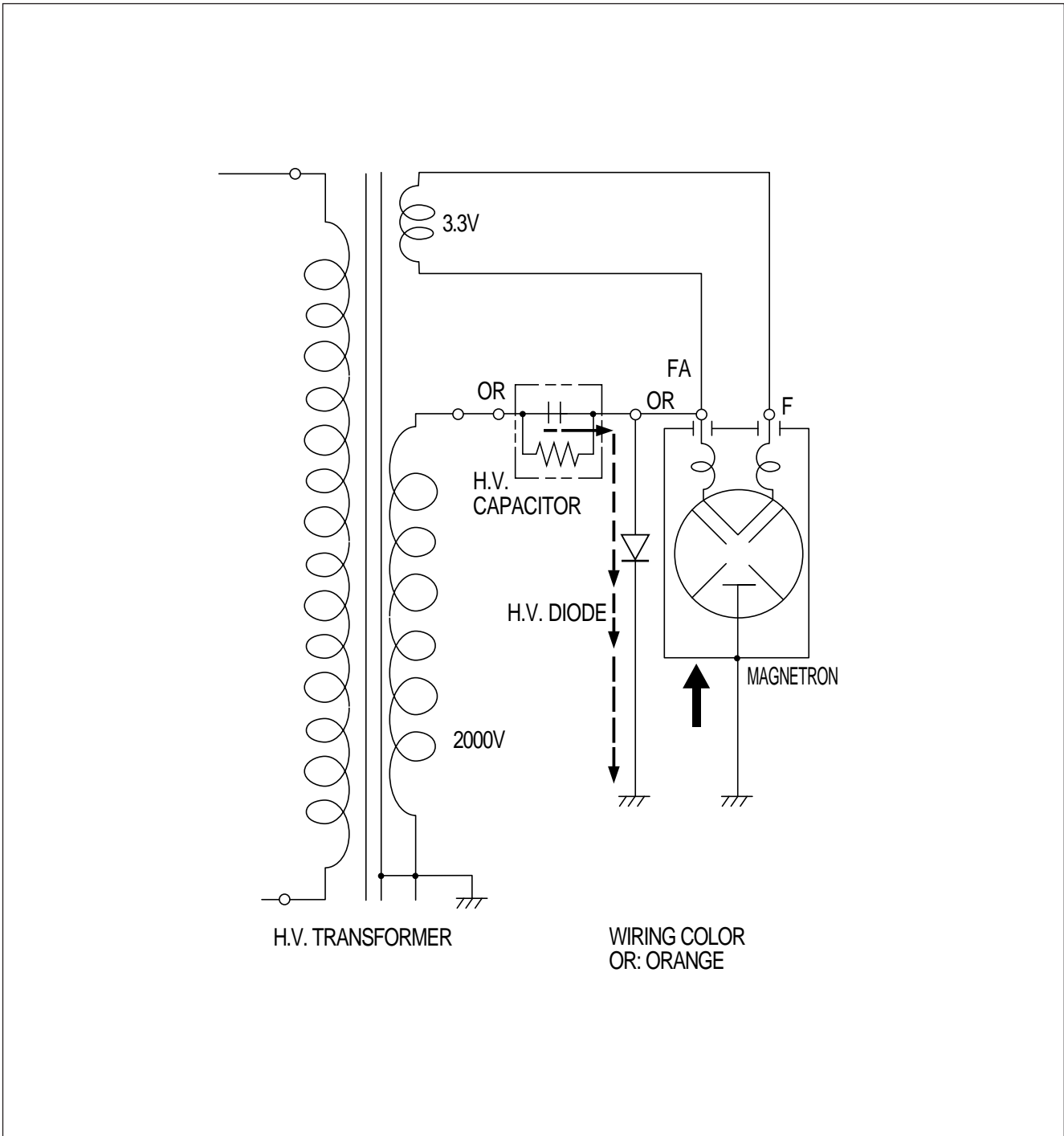


Fig.2

The touch control circuit controls the ON-OFF time of RELAY “1” in order to vary the output power of the microwave oven from “power level 1” to “5 (100%) power”.
 One complete ON and OFF cycle of the RELAY “1” is 29 seconds. The relation between indications on the control panel and the output of the microwave oven is as shown in Fig. 3



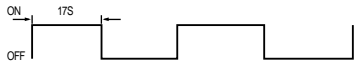
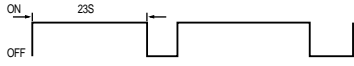
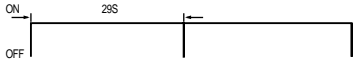
POWER LEVEL	OUTPUT POWER AGAINST FULL POWER	RELAY "1" TURN ON, OFF TIME
1	5/29	
2	11/29	
3	17/29	
4	23/29	
5	29/29	

Fig. 3

AUTO DEFROST CYCLE

When auto defrost is selected and the desired defrosting time is chosen, the automatic cycle divides the defrosting time into 5 periods of alternating defrost and stand times, by cycling on and off.

4. When the door is opened during cooking.

- 1) The primary interlock switch is opened to cut off primary voltage to the high voltage transformer to stop microwave oscillation.
- 2) The secondary interlock switch is opened to give the door open information to touch control circuit. The contacts of the RELAY "1" and "2" open, the display stops counting down.
- 3) Fan motor and turn table stop rotating.
- 4) The oven lamp turns off.
- 5) As soon as the door is opened, the interlock monitor switch contacts close and creates the short circuit.
- 6) If the contacts of primary interlock switch malfunction the 20A fuse blows open due to the large current surge caused by the short circuit activation, and this in turn stops magnetron oscillation (Fig. 1).

5. When the STOP/CLEAR button is touched during cooking.

- 1) The touch control circuit cuts the voltage supplied to the RELAY "1" coil and causes the magnetron to stop oscillating.
- 2) RELAY "2" turns off.
- 3) The display will show the time of day. If you don't set the clock, the display will show a colon.
- 4) The oven lamp turns off.
- 5) Fan motor and turn table motor stop rotating.