

Operational Description

When the food is placed in the microwave and the door is closed,

- a) the contacts of the safety switch open. (This switch creates a short circuit to blow a line fuse and stops microwave oscillation when the door is open during operation)
- b) The contacts of interlocks switches (primary and secondary) close the circuit by means of door key(s) action(s).

When the timer is set

- a) The contact of the micro switch closes the circuit.
- b) Oven lamp turns on.
- c) Fan motor starts rotating and cools the magnetron by blowing the air coming from the air intake beneath the oven over the magnetron fins. The fan motor also cools components inside the oven chassis to minimise the components temperature rise.
- d) The primary power supply voltage is applied to the high voltage transformer and generates approximately 3300 volts in the secondary winding and 3.3 volts in the filament winding.

Microwave energy is distributed in the cavity by a rotating stirrer antenna.

When cooking time is elapsed

- a) The contacts of time switch open the circuit and an audible signal indicates that cooking has been completed.
- b) The oven lamp turns off and fan motor stops rotating after approximately 1 minute.
- c) Magnetron stops oscillating.

The above functions are the basic operations of a microwave oven.

Microwave leakage is prevented by a fully welded cavity and a door with a $\frac{1}{4}$ wave trap system incorporated into the viewing window.