

# Microwave Repair

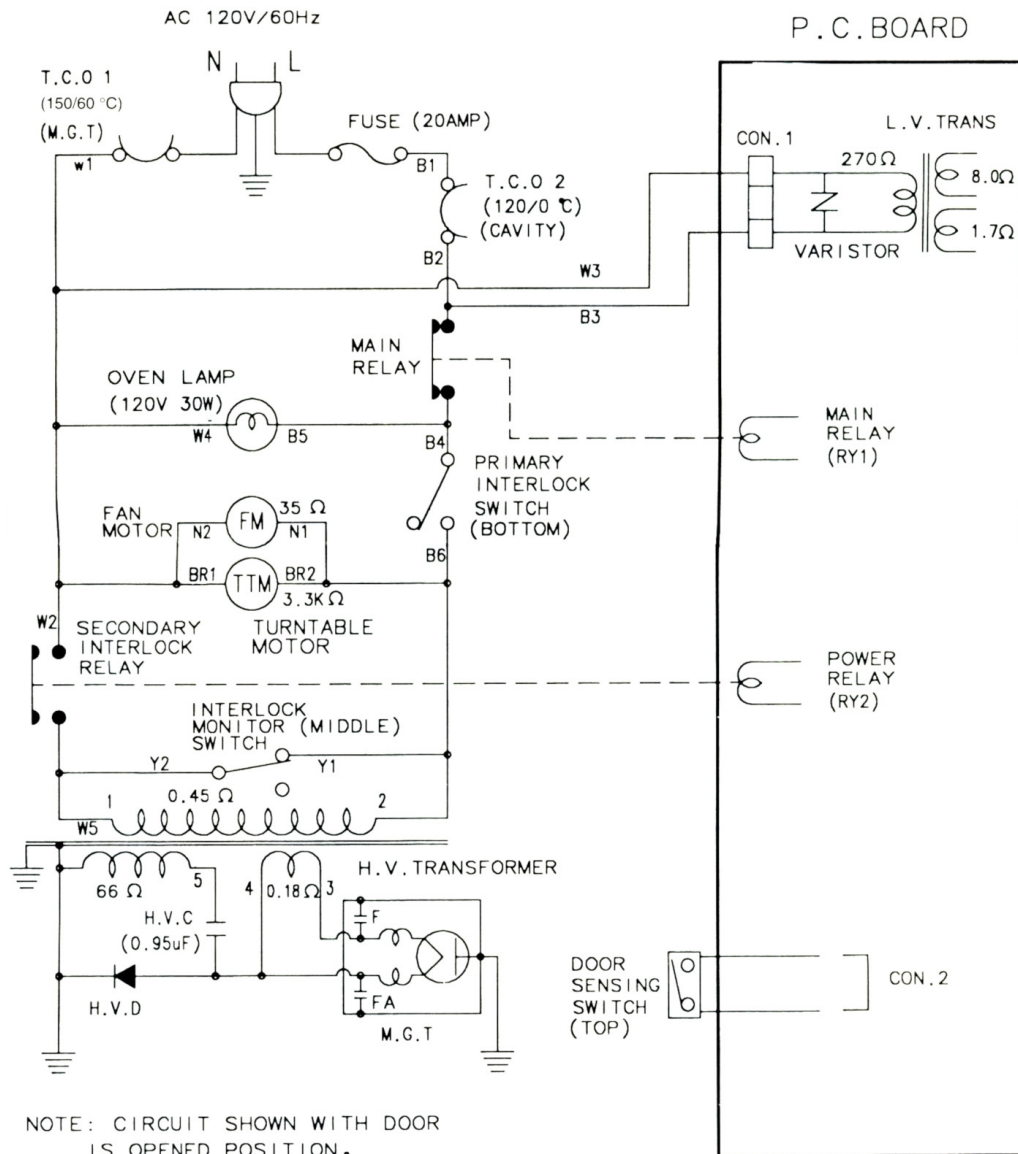
## (A) Magnetron

CODE NUMBER
74752-0058-00
MODEL NAME
JE1540, JE1530, JES1533
GE

# SCHEMATIC DIAGRAM

## WARNING

POWER MUST BE DISCONNECTED  
BEFORE SERVICING THIS APPLIANCE



NOTE: CIRCUIT SHOWN WITH DOOR IS OPENED POSITION.

NOTE: FOR SERVICE REPLACEMENT USE 16GA 105 °C THERMOPLASTIC COVERED WIRE EXCEPT FOR HIGH VOLTAGE LEADS OR AS NOTED ON SPECIAL LEADS.

PRINTED IN KOREA

Schematic Diagram (Magnetron is shown as M.G.T here)

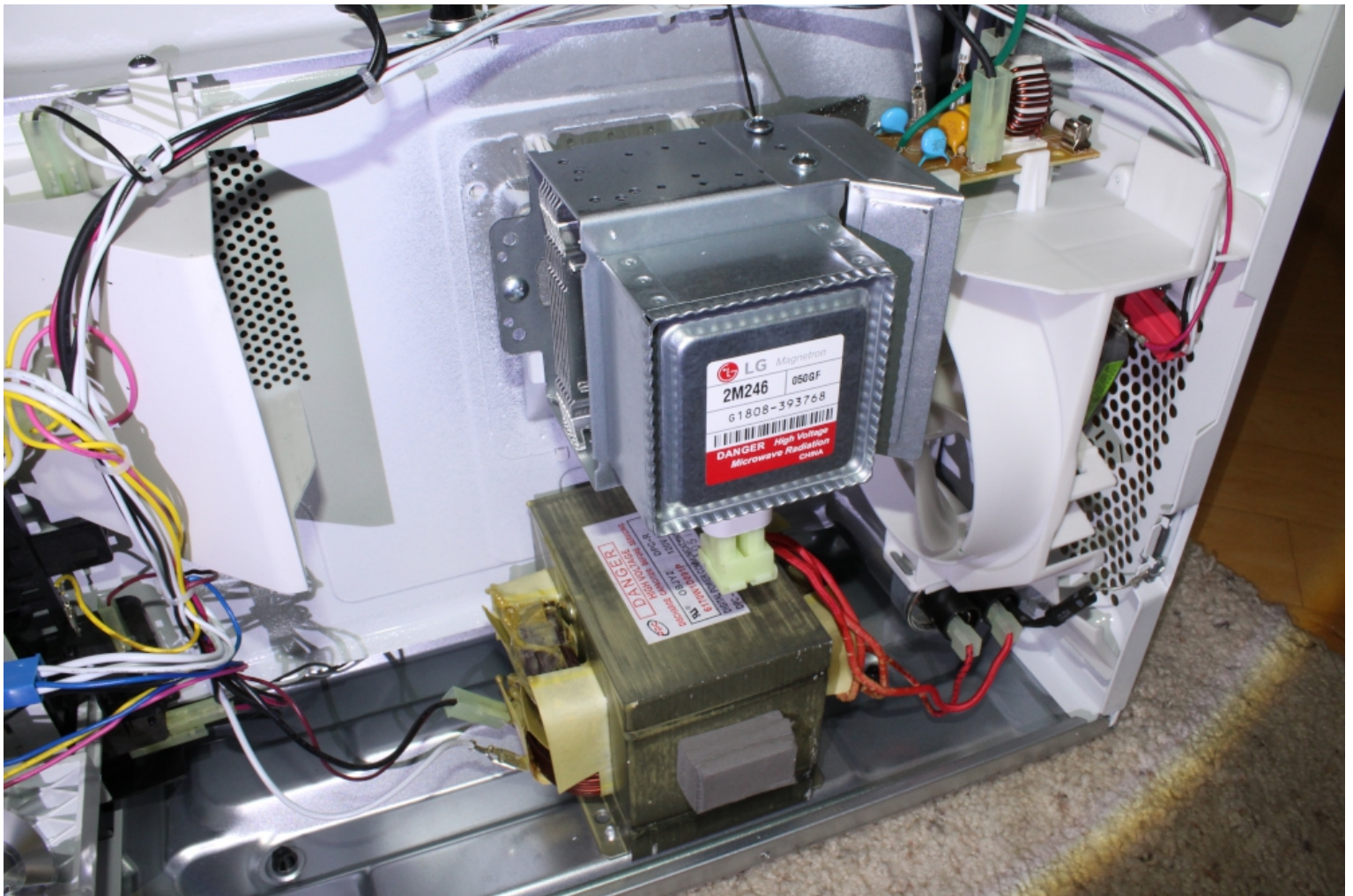
Microwave stopped working all of a sudden.

Due to the magnetron which emits powerful UHF (Ultra High Frequency, usually 2.45GHz is applied for consumer microwave) electro-magnetic wave to jumble water particles in material targeted to be got heated is a sort of old-fashioned vacuum tube driven by directly heated filament, the lifetime is not eternal (definitely much shorter than semiconductor although high voltage semiconductor is hard to manufacture stably).

High voltage diode (shown as H.V.D on the schematic diagram above) is one of causes of the failure. But It is more durable than magnetron, because of semiconductor.

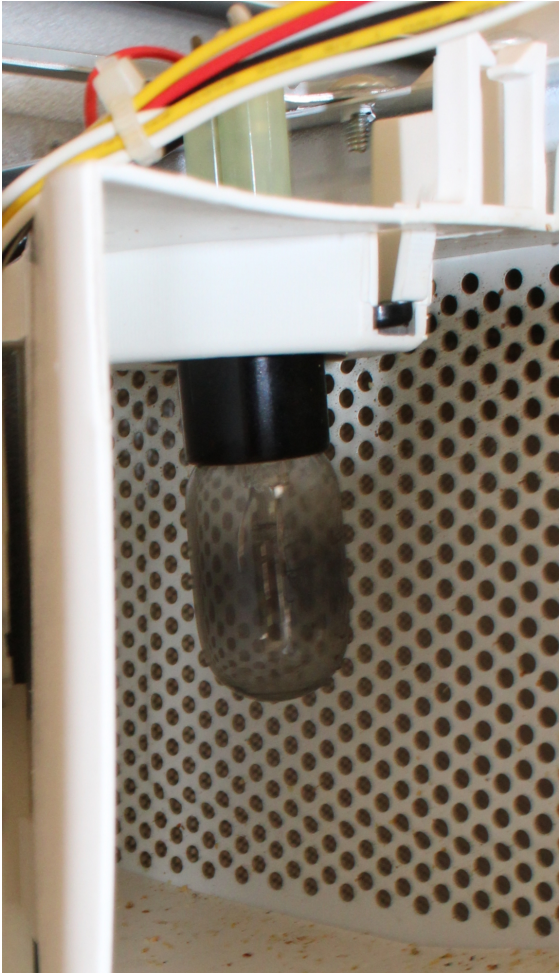


New & Old (Broken) Magnetron

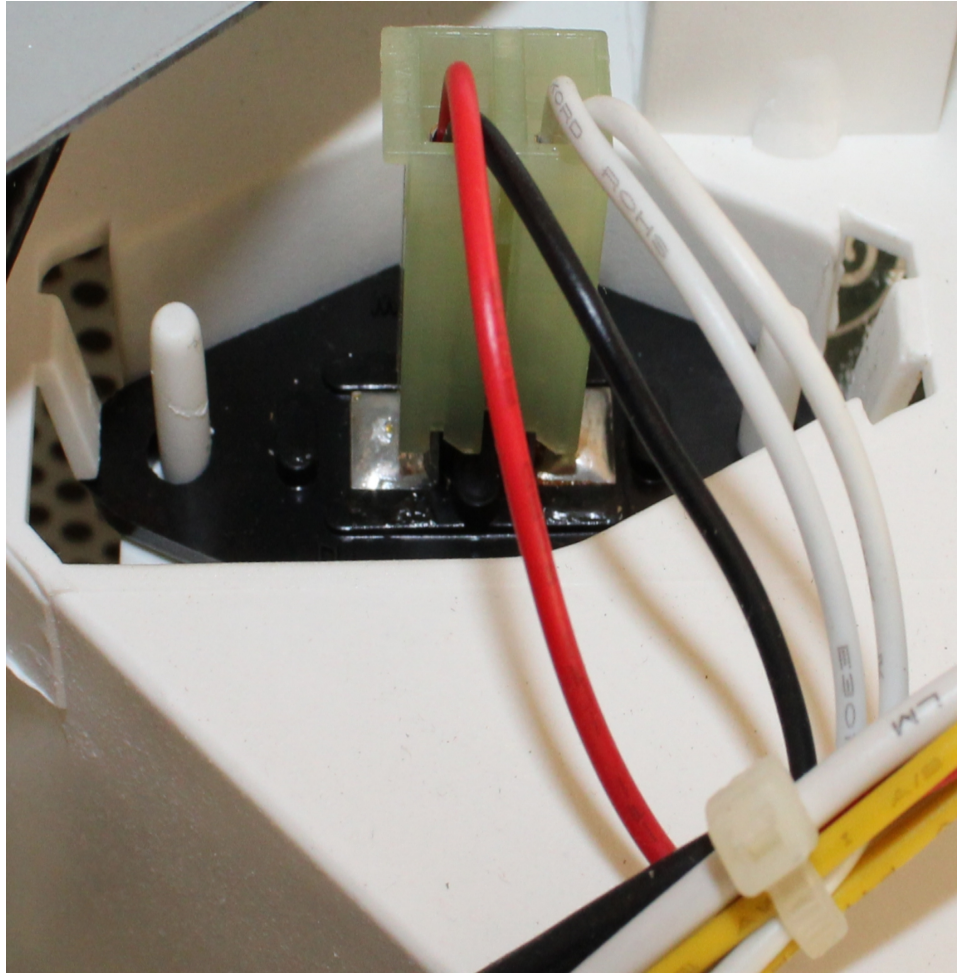


New Magnetron Assembled

## (B) Light Bulb



Burnt bulb (20W)



Bulb cartridge terminal

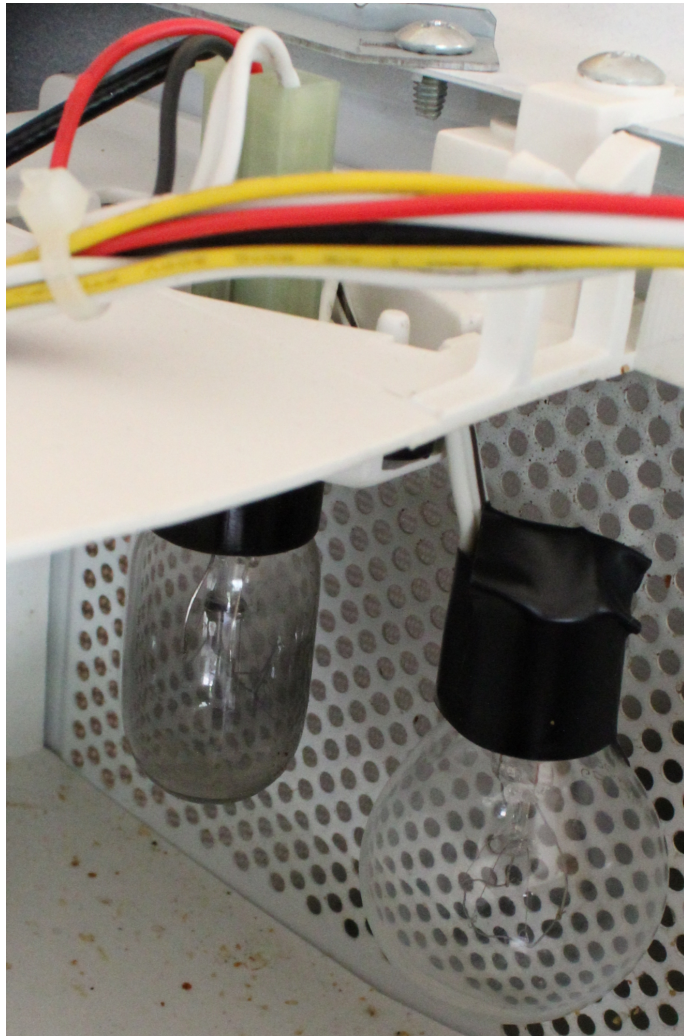
Filament of the light bulb was burnt and became not lit.

The cartridge of the light bulb is expensive (\$25).

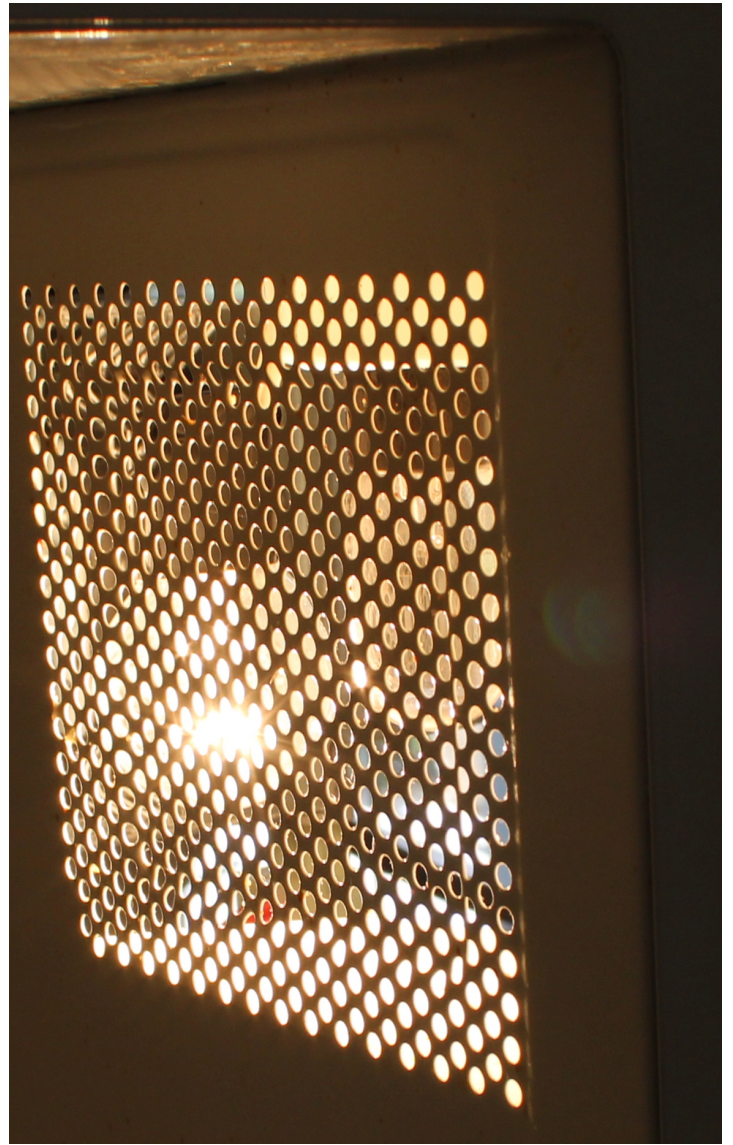
Fortunately because I had a 40W small incandescent light bulb as a stock, I soldered two wires between the bulb stem and the cartridge terminal, and put it beside the non-working bulb without removal.



Old & New bulb



Old & New bulb wired



Light bulb turned on