gorenje

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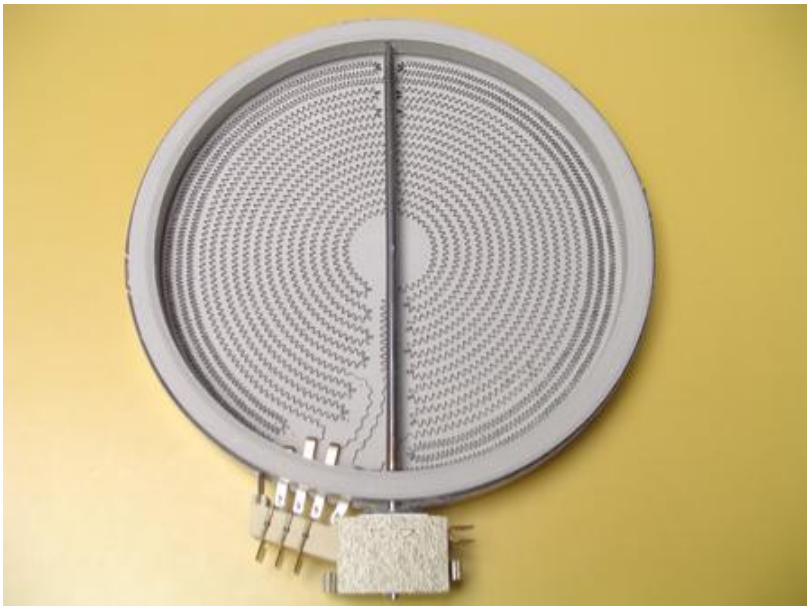
SERVICING INSTRUCTIONS

Cooking appliances 4-037-1138

Description and operation of radiant heaters

Photo below shows triple Hi-light radiant heater. Radiant heaters can be of different shapes and dimensions; we use also single and double-circle radiant heaters which may be round or oval. Heater's coil in the shape of tape glows in approximately 3 seconds after the heater has been connected to power supply. There are also the so called "Halo-light" heaters where halogen illuminant is wrapped around the coil which assures immediate illuminating indication of heater's operation.

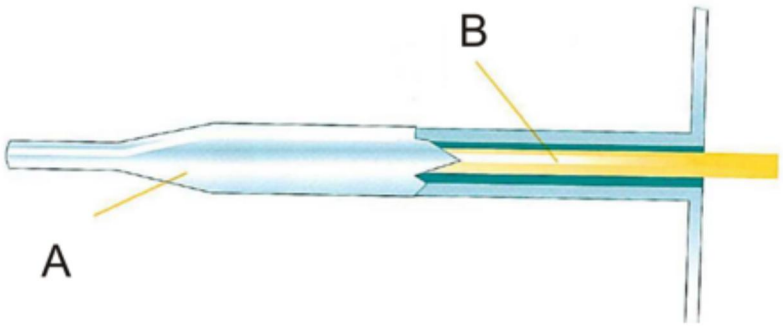


Temperature limiter:

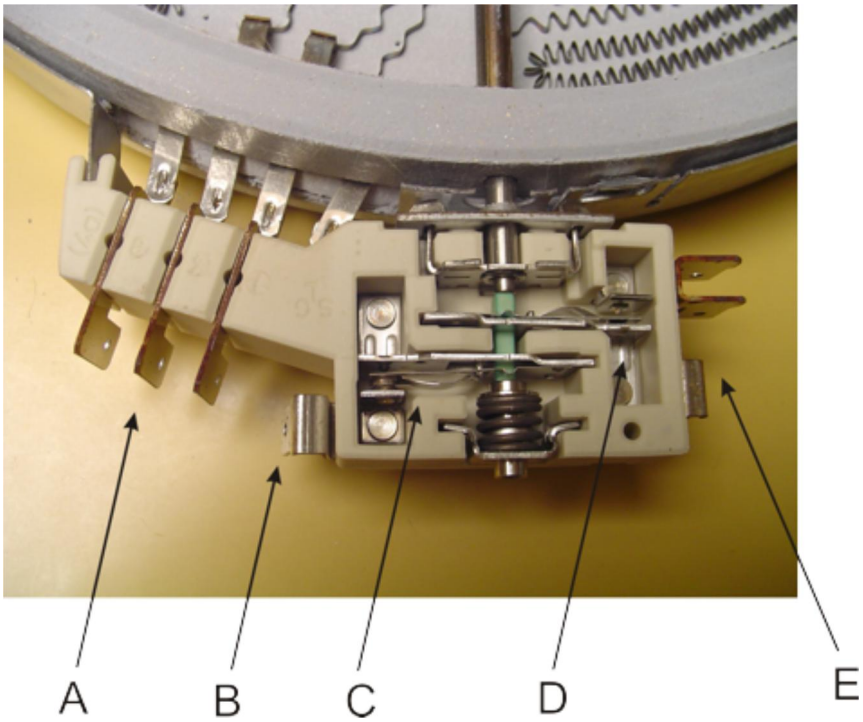
Radiant heater is equipped with temperature limiter; heating coils are connected through protective contact and there is also residual heat indicator contact.

In stainless steel tube there is a rod made of material (can be ceramics) which expands during heating. One end of the rod is fixed on the end of the tube, the other end of the rode is connected with switch mechanism. During heating the metal tube expands, it pulls along the rod and consequently, the switch mechanism is activated. The purpose of temperature limiter is to protect the glass against over-heating. The set temperature is usually 540 °C.

A - tube
B - rod



A – connections of coils
B – joint connection of coils
C – temperature limiter protective contact
D – residual heat contact
E – connections of residual heat indicator



Power setting:

The appliance can be controlled via electronic module or via energy switches.

In both cases the power is regulated by radiant heater cyclic switching on and off. Cycles for different electronic modules are indicated in the table below.

Heating power	CHEERY (ZF) On(s) / Off(s)	EGO On(s) / Off(s)	EIKA On(s) / Off(s)
1	1 / 45	2 / 50	1 / 42
2	3 / 44	3 / 45	2 / 40
3	6 / 41	6 / 43	5 / 38
4	9 / 37	6 / 34	7 / 34
5	11 / 35	7 / 32	10 / 31
6	14 / 33	12 / 26	15 / 28
7	21 / 26	18 / 21	18 / 23
8	28 / 19	25 / 14	25 / 16
9	On	On	On

Check of radiant heater operation:

Carry out ohmic measurement as shown in the example below. The expected ohmic resistance can be calculated from power and voltage.

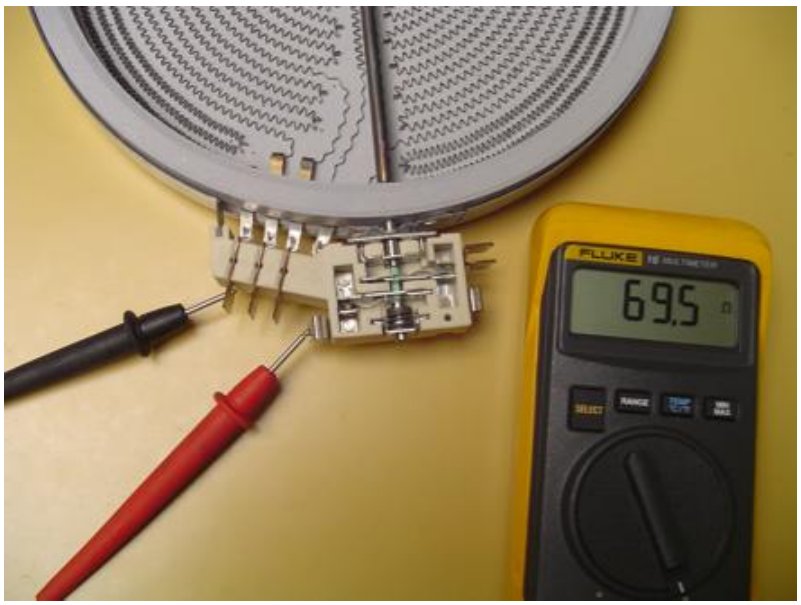


Photo below shows an active heater on which the section without coil i.e. glowing is evident. Sometimes the clients claim this.