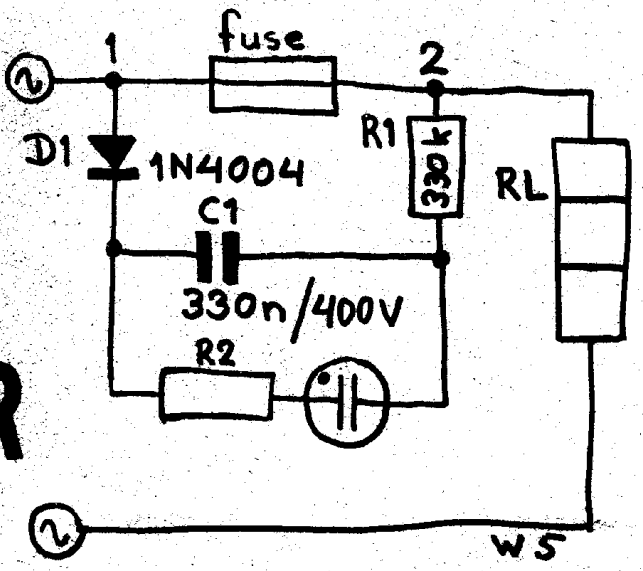
In the 'valve era', the first step in any fault-finding procedure was to check whether all filaments were glowing. If none of them were (and they were not connected as a series chain) the next step was to check the mains fuse.
One of the disadvantages of semiconductors, from the fault-finding point of view, is that they haven't got filaments. Obviously, there is now a need for a

BLOWN FUSE INDICATOR



As long as the fuse is intact, points 1 and 2 are virtually shorted. However, if the fuse is blown the full supply voltage appears between these points. C1, R1, R2 and the neon lamp form a very low frequency neon oscillator. When the supply voltage appears between points 1 and 2, the neon lamp will start to flash on and off.
The repetition rate can be altered by changing the value of C1. R2 is the series resistor that is often built in to neon lamps; if a neon lamp without series resistor is used, there is no real need to add one.
However, if the flashes are found to be unnecessarily bright, a series resistor of 10 k . . . 47 k may be added.