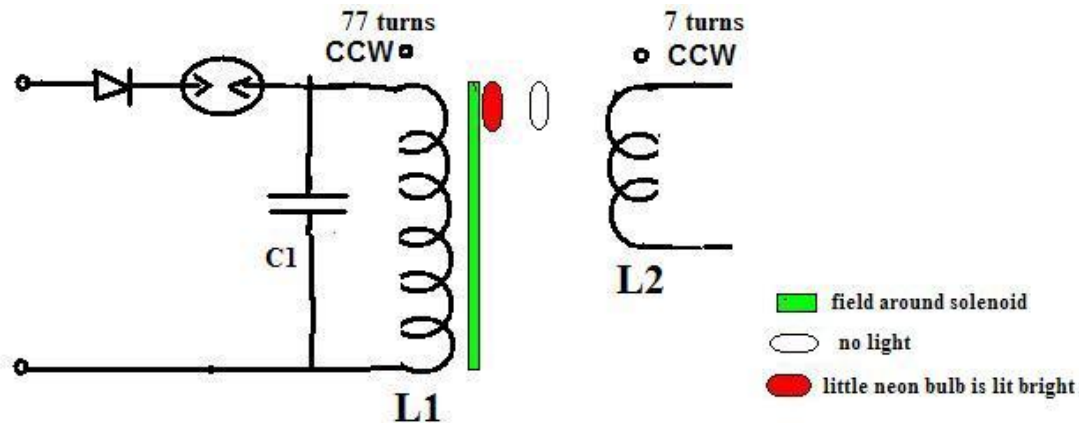


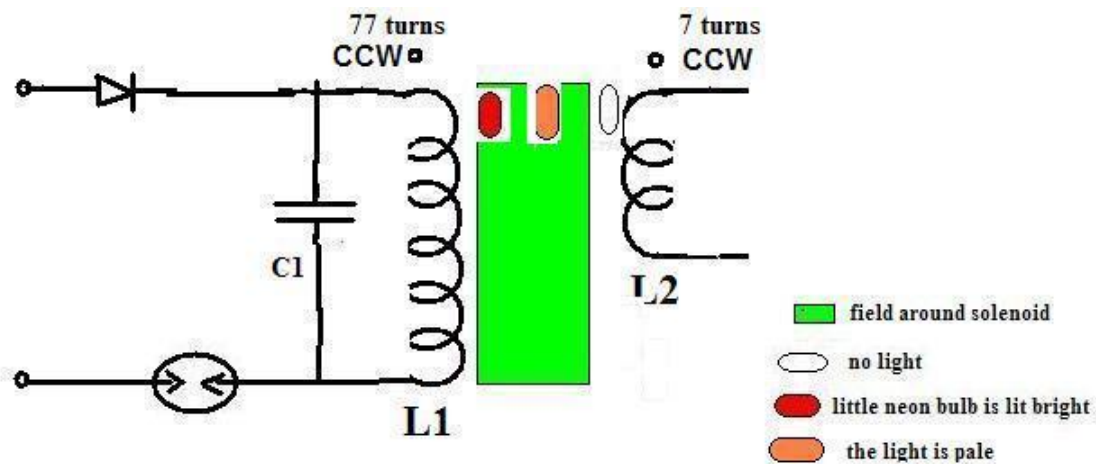
Different positions with spark gap and capacitor

The capacitors value is 1 nF 2000V



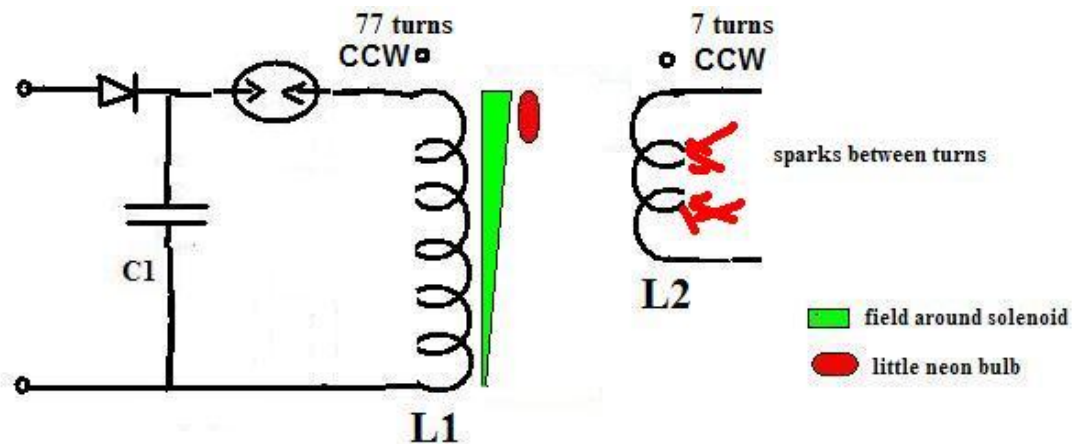
The situation when the spark gap take place in the upper side of the circuit and before the capacitor.

The field around the solenoid L1 is weak, and to lit the neon bulb you nearly should touch the solenoid, there is no spark between the turns on the secondary L2 when they are shorted



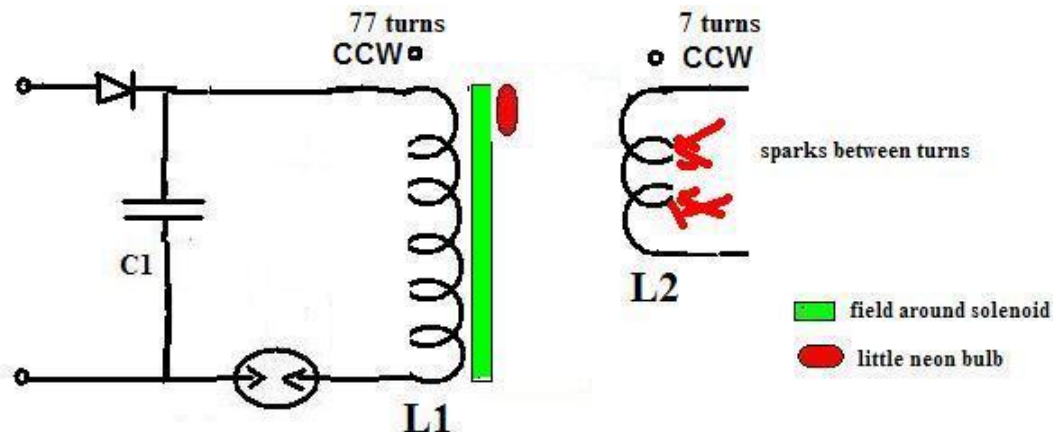
The situation when the spark gap take place in the down side of the circuit and after the capacitor

The field around the solenoid L1 is stronger, the neon bulb start to dimm about 10 cm from the solenoid and when it is positioned near then light bright, but there is no spark between the turns on the secondary L2 when they are shorted



In this situation when the spark gap is placed between the capacitor and the solenoid and on the upper side of the circuit then the field around solenoid L1 is weak and the bulb is lit brightly only on the upper side of the solenoid L1 while on the bottom of the solenoid there is no light at all.

But on the secondary side there is a spark between turns although we can touch the solenoid L2 with a not isolated by bare hand no shock at all



Here the difference is that the solenoids L1 field is equal everywhere and the neon bulb lights bright if it is close to L1, there are sparks on the secondary L2 coil if it is shorted and no shocking at all if it is touched by hand

The upper situation is when the capacitor is placed in parallel with solenoid L1 and the spark gap in series.

There is a same situation when we change the position of the spark gap and the capacitor, namely when spark is in parallel and the capacitor is in series.