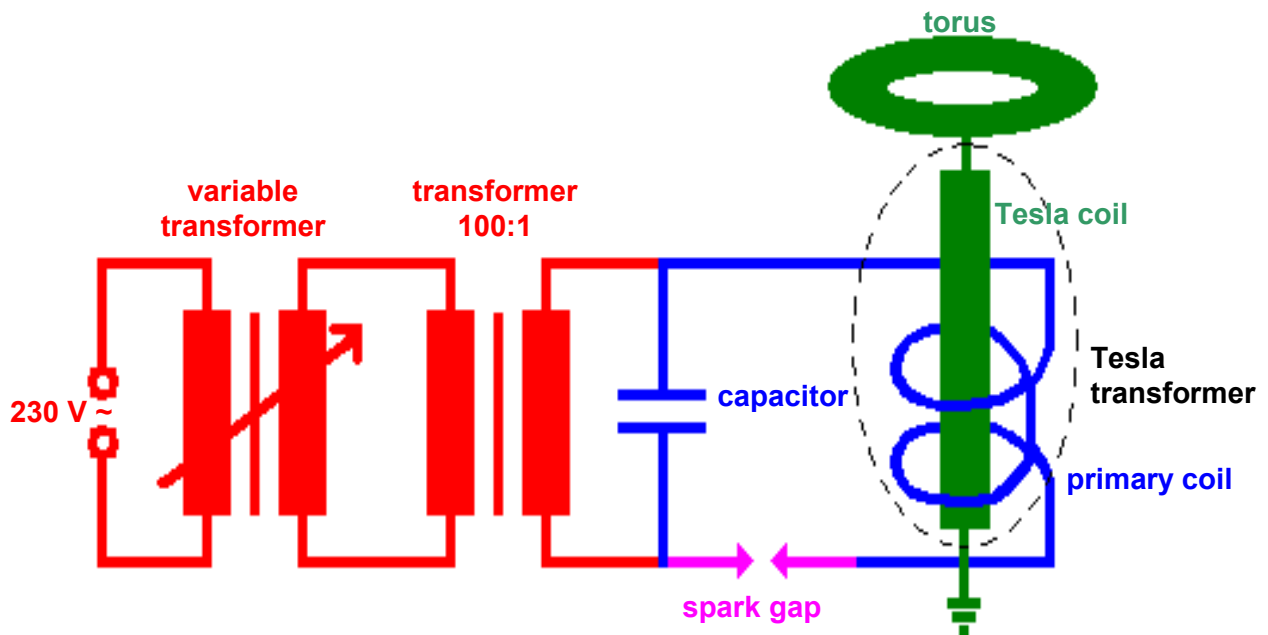


Simplified circuit diagram of the Tesla plant:



The Tesla plant consists of several component parts:

Power source: A toroidal core adjustable transformer will turn the line voltage of 230 V into anything from zero to 230 V. This voltage is then centupled by a further transformer.

Capacitor: This high voltage charges the capacitor.

Primary coil: Capacitor and primary coil form the **primary resonant circuit** that is closed by way of the

Spark gap: During a spark's short life-time, electrons oscillate in the **primary resonant circuit** (electromagnetic oscillation).

Secondary coil ('Tesla coil'): The oscillating electrons induce alternating voltage in the Tesla coil, which has considerably more plies than the primary coil.

Torus: Together with its environment, the torus forms a capacitor; together with the **Tesla coil**, it forms the secondary resonant circuit. The high voltage we experiment with is generated between the torus and its environment.

The **primary** and **secondary resonant circuits** together constitute the '**Tesla transformer**', which, together with the power source, constitutes the 'Tesla plant'. The two circuits should be in a state of resonance; in other words, their electrons should oscillate at the same frequency.

The following arrangement of the plant (with the transformer 100:1 and everything to the right of it) corresponds to the simplified circuit diagram:

