



PH1170B
Induction Coil

IN SCIENCE TOGETHER



SCIENTIFIC RESOURCES



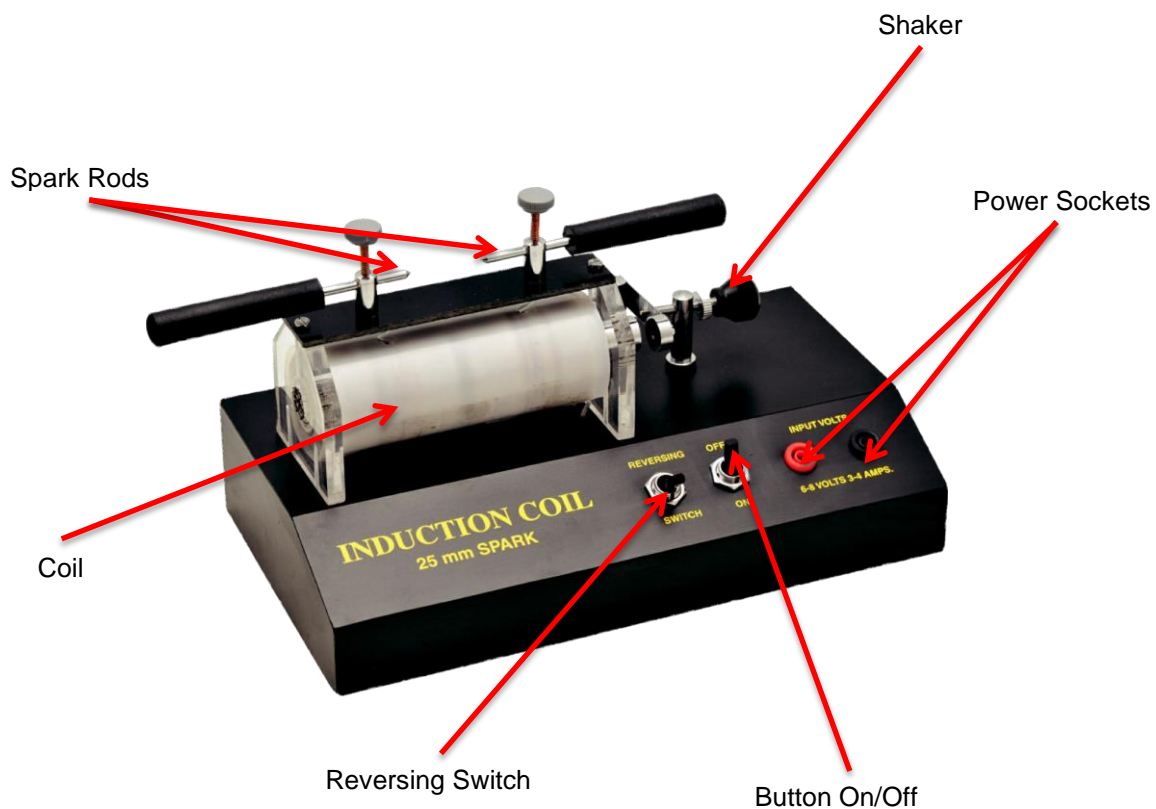


General Background :

The induction coil provides very high voltages (several tens of thousands of volts) from a DC source. The principle is based on a step-up transformer comprised of a primary winding, a few tens of turns, and a secondary winding, hundreds of thousands of turns. To produce permanent sparks, it is necessary to cut the current flowing in the primary winding with a shaker (electromagnetic bell).

Components Included :

S.No.	Name	Quantity
1.	Coil	1
2.	Spark Rods	2
3.	Shaker	1
4.	Reversing Switch	1
5.	Button On/Off	1
6.	Power Sockets	1





Connection :

Simply connect a power supply 8V – 4A maximum. The continued production of sparks is obtained by adjusting the shaker and voltage.

Caution :

Be careful while touching this instrument when it is running because very high voltages are generated. Spark gaps can produce X ray and UV radiation. Do not stand closer than necessary and avoid being closer than about 2 or 3 meters from the spark discharge. Should be used in presence of an adult lab technician.



