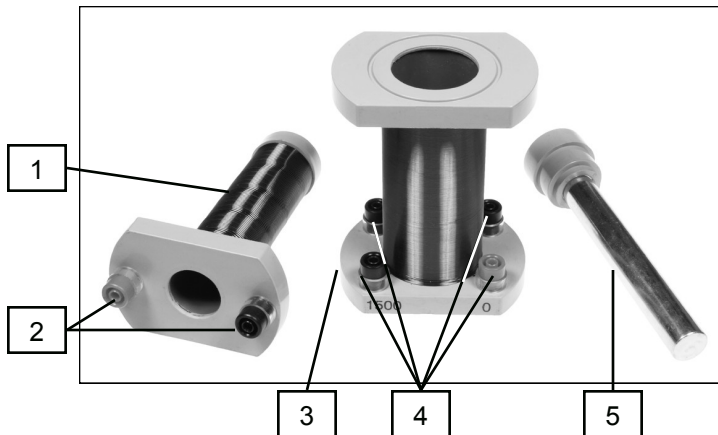




## **PRIMARY AND SECONDARY COILS**

**PSC001**



*Figure 1*



*Figure 2*

### **DESCRIPTION**

The PSC001 Primary and Secondary Coils consist of a small diameter primary coil (1, *Figure 1*) with 175 turns of 18 AWG insulated copper wire and a pair of shielded sockets (2), a larger diameter secondary coil (3) with 1500 turns of 26 AWG wire and four shielded sockets (4) to allow 500, 1000, or 1500 turns to be selected, and a plated iron core (5) with a molded handle.

The core and primary coil fit inside the secondary coil (*Figure 2*). Experiments to demonstrate the principles of electromagnetic induction using a d.c. or a.c. power source can be easily carried out. Self-induction with a single coil and mutual induction with both coils can be shown either with or without the iron core in place. The secondary coil may also be used separately as a solenoid.

The molded plastic formers provide robust support for the coils and ensure that the apparatus can withstand laboratory use.