



Educational Products & Systems

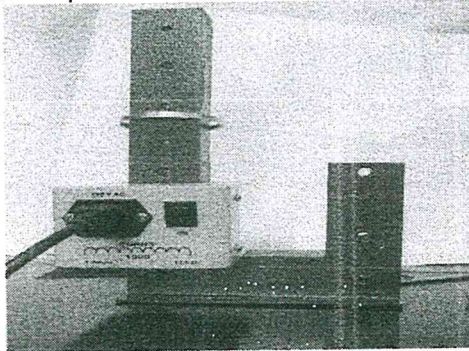
Teacher's Instructions

Transformer Accessory Kit 1

This can be used to demonstrate Lenz's Law and Induction Heating

Lenz's Law

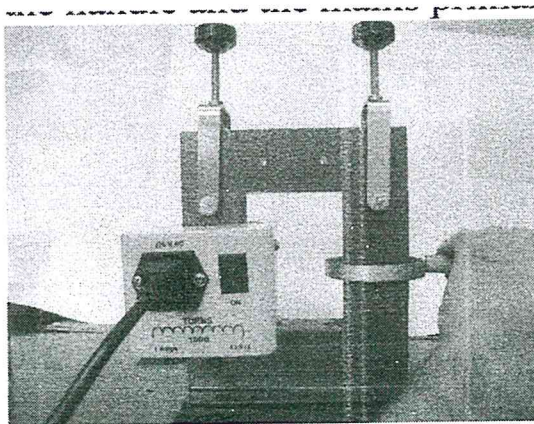
1) Set up as in the picture with the 1200 turn mains coil on one of the arms and put the top section of the core vertically above it.



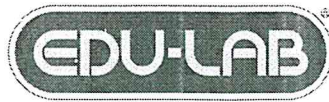
2) Put the unbroken ring on the vertical arm and when the current is turned on the ring will rise up. (Take care the ring gets very hot). If the complete ring is replaced by the ring with a gap then it will not rise up as the Eddie currents can not flow through the ring as they could in the first example.

Induction Heating

1) Set up the transformer with the secondary coil being the single ring with the handle and the mains primary coil



2) If a small amount of water is put into the ring, it will soon boil due to the large induced current flowing through it.

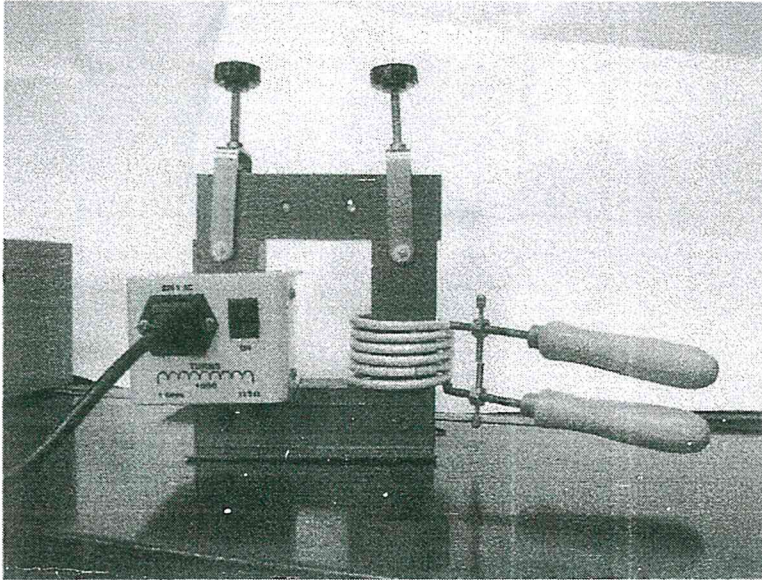


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Teacher's Instructions for Transformer Accessory Kit 1 continued

Welding two rods together

- 1) Set up the transformer with the mains primary coil and the six turn thick coil with handles as the secondary.



- 2) If the handles are squeezed so that the rods make contact when the mains is turned on then there will be a large enough current produced to weld the contacts together.