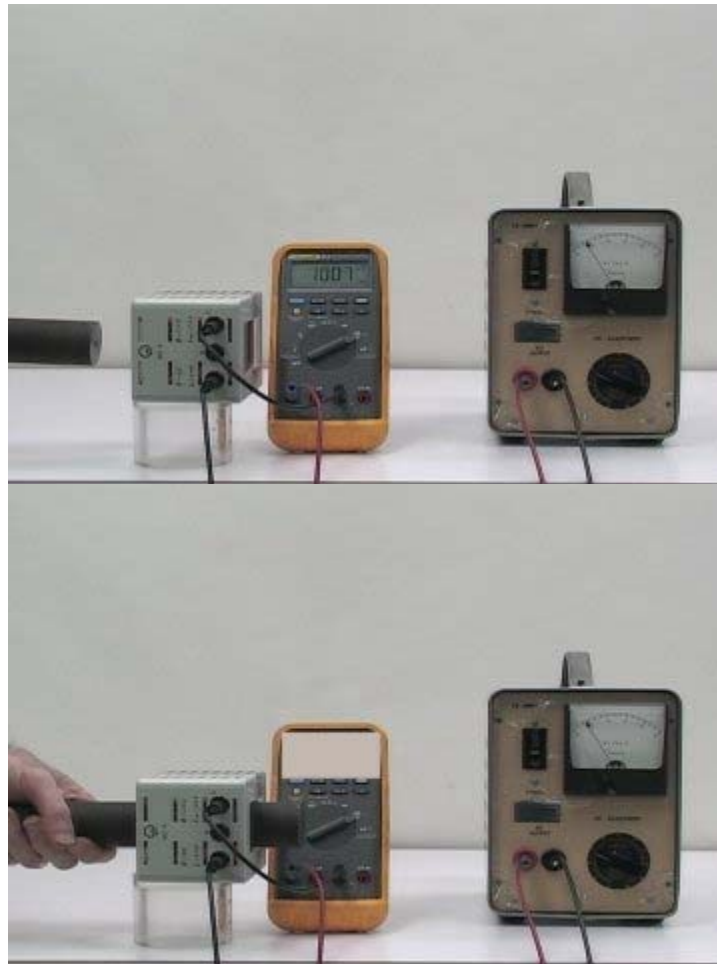


Question #281

Electrical current is supplied to a 500-turn coil by the DC power supply on the right in the photographs below. A digital meter displays the current (1.00 Amperes), as seen in the photograph.



Dan is holding the large iron core, composed of a number of heavy iron wires to minimize eddy currents, seen in the picture at the left of the coil.

Dan will now thrust the iron core into the coil, stopping when the core is nearly centered in the coil, as seen in the photograph at the right.

When Dan thrusts the core into the coil, the current in the coil, as measured by the digital meter will:

- (a) go up and stay up.
- (b) go up and then return to its original value.
- (c) remain the same.
- (d) go down and then return to its original value.
- (e) go down and stay down.

Click here for [Answer #281](#) after April 9, 2007.

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For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](#) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](#).