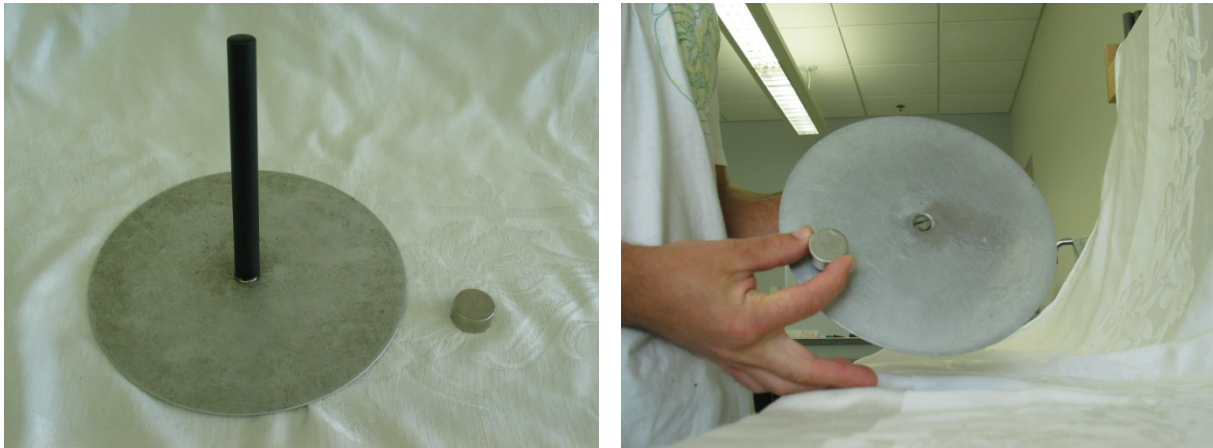


## Lenz's Law Disc



**Purpose:** To demonstrate Lenz's Law by using a magnet to stop a spinning aluminum disc.

**Location:** Room 146; shelf N1; magnet on M6.

The aluminum disc is loosely attached to a black handle. Do not tighten or loosen the screw, it is set so it won't get tighter or looser when the disc is spun. Any magnet will work with this demo, but the larger, broken neodymium magnet works the best. Show the class that the magnet is not attracted to the plate while it is not moving. Give the disc a good spin and see how long it takes for the plate to come to a rest. Now give the disc a spin and quickly bring the magnet up to the disc, without touching it. The disc will stop spinning almost immediately. The magnet induces eddy currents in the disc which in turn produce an opposing magnetic field, which slows the motion of the disc.