

Film Canister Cannon



Purpose: To demonstrate the rapid conversion of chemical energy stored in a flammable substance into thermal energy and mechanical kinetic energy.

Location: room 136, shelf P2

Remove the bottom of the film canister from its lid. The wires should pass snugly thru the lid with no space for leakage. Add **2 drops** of ethanol to the canister and firmly reattach the lid. Shake the canister and rub it with your hands for several seconds to warm it. With the canister aimed away from students, towards a clear area (allow at least 10 feet of space) press the red button on the igniter. The spark should ignite the ethanol vapor and shoot the canister several feet with a loud bang.

****Warn students that this demonstration makes a very loud bang!****

****Do not use more than 2 drops of ethanol!****