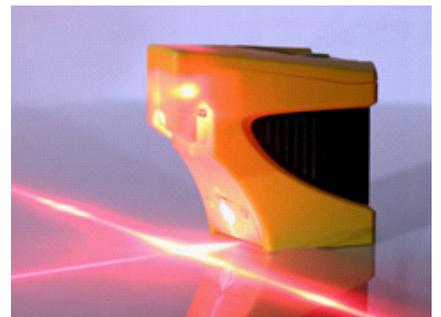


## Topic: Lockout

- The “basic” electrical lockout procedure goes like this:
1. Push the stop button
  2. Pull the breaker at the panel
  3. Apply a lock to the breaker
  4. Test the equipment to be sure it can't start



- Stored energy**
- Elevated equipment
  - Bins, chutes
  - Pressurized vessels/pipes
  - Volumes of liquid
  - Stacked materials
  - Springs under pressure



In each of these cases, you need to control any energy which could harm you, bleed off any stored energy, and apply a device (block, blank/blind, lock, etc.) to ensure that the energy can't be reapplied while you're in the danger zone.

Please see your organization's lockout program for specific, detailed lockout procedures.

But that's just a simple lockout of electrical equipment. In addition to electrical energy, you also need to consider whether you could be in danger of injury or engulfment from any other source of energy. Here are a few other energy sources to consider:

- Mechanical Energy**
- Hydraulics
  - Air valves or operation
  - Equipment or machinery



- Nuclear Energy**
- Microwave sources
  - X-Ray
  - Laser Lights