



Using a voltage detector will prevent shocking discoveries

The purpose of this activity will be to use a simple voltage detector to alert workers to the presence of electricity in order to prevent making contact with electrical current flowing through any electrical device.

It's amazing how many people are unaware of voltage detection devices, how they work, or how they could potentially save their life or prevent electrical shock. These inexpensive devices should be included in the toolbox of anyone working around electrical devices. Electricity rarely gives a second chance. It is simply too fast.

Procedure:

1. Plug the extension cord into an outlet
2. Using a voltage detector and the electric cord demonstrate to participants how it can be used to detect a "live" circuit or the presence of electrical current flow.
3. Unplug the extension cord and again use the voltage detector to see if an electrical current is present.
4. Explain that the device senses the electromagnetic field generated by current flow and makes, usually, both a visual and audio warning. If the device issues a warning, the risk of electrical shock is present, and the power source needs to be disconnected before any work can be done on the device or circuit.

Materials Needed



Voltage
detector



Extension
cord

Since the voltage detector is battery operated, show participants how the battery is tested. It also can be tested with any live circuit such as a receptacle where it should provide a warning. The device does not need to come into contact with a live circuit to set off a warning.