

Jason Mechanical Corp

Tool Box Safety Talk

Electrical Work – II

Only qualified persons may perform testing work on electric circuits or equipment.

When working around any electrical power circuit, employees will:

- a. protect themselves by deenergizing the circuit and grounding it or by establishing insulation between themselves and the current.
- b. ensure that any conductive materials and equipment that are in contact with any part of their body will be handled in a manner that will preclude contact with exposed energized conductors or circuit parts.
- c. use portable ladders that have non-conductive side rails.
- d. remove or insulate conductive articles of jewelry and clothing that might contact exposed energized parts.

All 15, 20, or 30-amp receptacle outlets that are not part of the permanent wiring of the building or structure and that are used by personnel shall have ground-fault circuit interrupter protection for personnel. GFCI pigtails may be used to meet this requirement if properly sized. Remember, extension cords are considered temporary wiring. You must assume all lines, cables, capacitors, or parts have an electrical hazard until you are absolutely sure they have been deenergized, grounded, and free from potential electrical energy hazard.

Ground fault circuit interrupters are to be tested before use.

What's so dangerous about electricity? Electricity can, depending on the amperage and your individual physiology, cause a faint tingle, a slight shock, involuntary muscle spasms, painful shock, loss of muscular control, the inability to release your grasp, extreme pain, respiratory arrest, and death.

Electricity, under the right circumstances such as striking or cutting a main power cable, can literally blow your body apart.

An electrical burn should be treated as a serious injury and medical evaluation should be considered immediately after such an event. Unknown internal damage may take place as electricity is flowing through your body.

In a real sense, your body is an electrical system and a major electrical overload may result in temporary or permanent damage to your skin, muscles, bones, blood vessels, nerves, and organs. Only a physician can properly diagnose electrical burn injuries.

Using the proper equipment and work methods, working around electricity is perfectly safe. If you are not absolutely sure of what you are doing, DON'T DO IT!