

# THE CONNECTION

FEBRUARY 2002



## TIME FOR AN ELECTRICAL CHECKUP

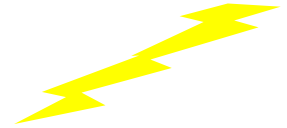
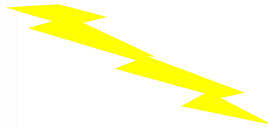
Electrical sources and electrically powered equipment are common to all workplaces. But when electricity breaks loose from the confines of its circuits, it takes very little to injure or even kill an employee. Electrical problems can also result in deadly and costly fires. That's why electrical safety is so important.

On your next walk around the jobsite, be sure to carry along this electrical safety checklist:

- Are all switchboxes and electrical panel doors closed and secured?
- Are all switchboxes and electrical panels clearly marked to indicate what they control?
- Are extension cords kept away from heavily trafficked areas where they could be damaged?
- Are power sources free from overloading?
- Are high-voltage areas clearly marked and properly restricted?
- Are spills near electrical equipment quickly cleaned up?
- Are outside areas examined for live overhead wires before any work begins?
- Are power hand tools properly grounded or double insulated?
- Are all power tools equipped with power-surge guards?

This by no means covers every possible electrical hazard in the workplace. But it should give you a place to start.

## HOW IS YOUR RESISTANCE TODAY?

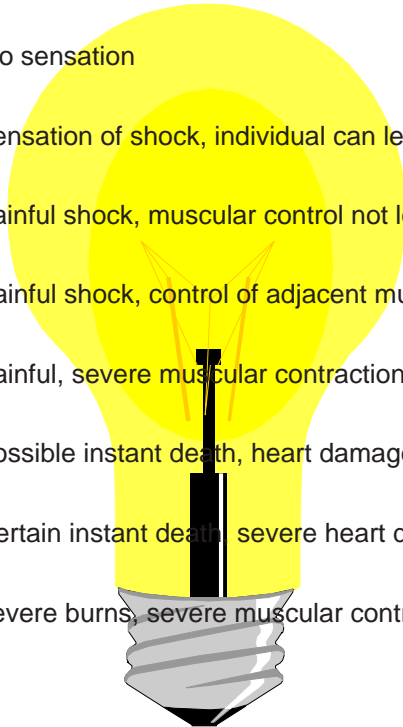


No, not to the common cold, but in ohms. If you are working where the area is dry and well ventilated, chances are that your body resistance would be as high as 600,000 ohms. Damp and warm, it could be as low as 1,000 ohms.

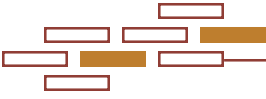
We know what voltages we are working with and also are aware of the conditions of the job.

Now what could the result be? Please note that the following figures are in units of milliamperes. Remember now that it will take almost 1,000 of these units to light the single 100 watt lamp on your table at home.

- 1 ma..... No sensation
- 1-8 ma.....Sensation of shock, individual can let go at will
- 8-15 ma.....Painful shock, muscular control not lost
- 15-20 ma.....Painful shock, control of adjacent muscles lost, cannot let go
- 20-50 ma.....Painful, severe muscular contraction, breathing difficult
- 50-100 ma.....Possible instant death, heart damage
- 100-200 ma.....Certain instant death, severe heart damage
- Over 200 ma.....Severe burns, severe muscular contractions, no heart damage



All these figures and we are still not up to the amount of current flowing in that 100 watt lamp. Please tell your wife and children about this article. It would be good to keep them safe also.



## ELECTRICAL EMERGENCY KNOW-HOW

You know the importance of taking proper safety precautions when working with any kind of electrical equipment. But accidents happen. When they do, are you prepared to deal with them? Here are some important points to remember:

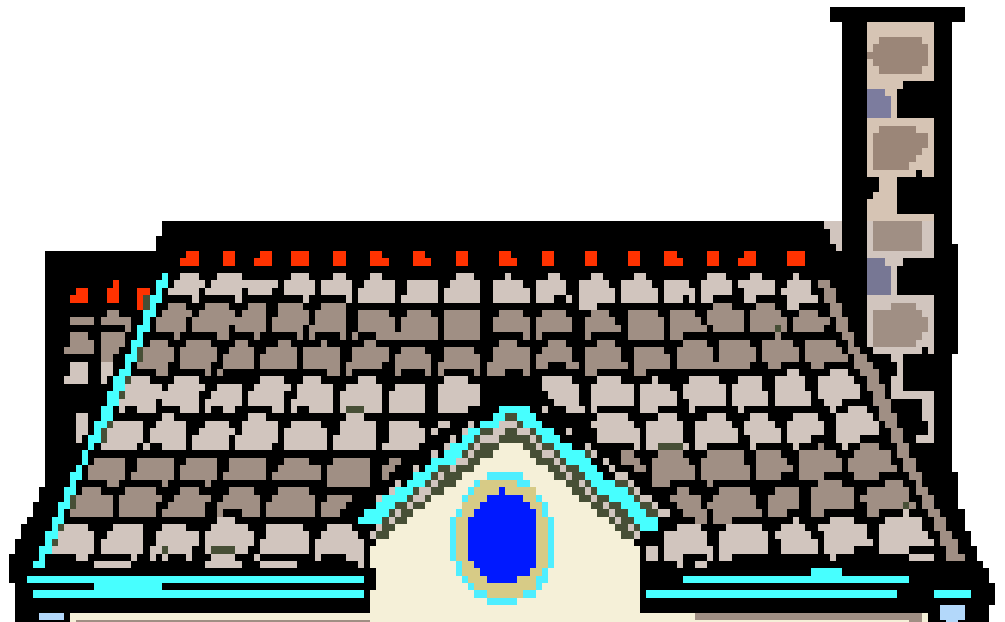
### Electrical Fire:

Turn off power at the main switch, or unplug tool or equipment if possible. Use a nonconducting element to extinguish electrical fires - a halogenated compound, carbon dioxide, or a dry chemical extinguisher. **NEVER USE WATER OR A WATERBASED AGENT!**

### Electrical Shock:

If possible, disconnect plug or turn off main switch. If not, stand on a dry surface and, with dry hands, free victim with a dry board, rope or stick. Seek medical help. Unconsciousness may occur because electrical current can disrupt breathing. If victim has stopped breathing, begin artificial respiration at once. Once breathing has resumed normally, place victim's head lower than his feet and keep him warm until help arrives.

Bureau of Business Practice



## HOW SUSCEPTIBLE IS YOUR HOME TO A CATASTROPHIC FIRE?

Each year, incidents involving electrical equipment, such as extension cords, outlets and light bulbs, result in more than 41,000 residential fires that claim about 350 lives and cause over 1,400 injuries. These fires also cause more than \$620 million in property damage annually.

Consumers can help protect themselves from electrical hazards by taking a few minutes to check their homes for unsafe conditions. Use this check list to determine your susceptibility to a residential electrical fire:

Make sure extension cords are in good condition.

Check to see that extension cords are not overloaded as indicated by the ratings labeled on the cord and the appliance.

To reduce the risk of electric shock, make sure that GFCI protection is provided for outlets at kitchen counters, in bathrooms and at outdoor receptacles. Test GFCIs monthly.

Check the wattage of all bulbs in light fixtures and lamps to make sure they are the correct wattage. Replace bulbs that have a higher wattage than recommended to prevent overheating.

Check to see that fuses are the correct size for the circuit. Replacing a correct size fuse with a larger size fuse can present a serious fire hazard.

Repair or replace any appliance that repeatedly blows a fuse, trips a circuit breaker or has given you a shock.

If outlets and switches are unusually warm or hot to the touch, an unsafe wiring condition could exist. Do not use the outlet or switch and have a qualified electrician check the wiring as soon as possible.

Safety And The Supervisor