Don’t Take Shortcuts



WHAT’S AT STAKE?

The only people who should be working on energized electrical equipment are those who are fully trained and qualified, properly equipped and authorized to do so. For the rest of us, we need a basic understanding of how electricity works and how to avoid electric shock.

WHAT’S THE DANGER?

Always be aware electricity will take the shortest path from its source to the ground. That path could be right through you, causing electrical shock.

EXAMPLE

Here’s an example of what can go wrong:

A trained and qualified electrical technician was called to Lining Machine Number One because of problems with a main drive feed motor. In order for her to properly test the motor, the liner control panel had to be electrically energized.

There was a specific standard operating procedure for this repair, but she was in a hurry because her shift was almost over. Instead of following an exact procedure, she performed her job from memory. She used one hand to check the fuses, while bracing herself with her other hand against a steel control panel cabinet.

As she checked the fifth fuse, her index finger unintentionally contacted a nearby 480-volt three-phase fuse energized with 100 amps. Because she had placed her hand on the steel control panel cabinet while kneeling down, she grounded herself to it and thus received the full effect of the electric shock. Luckily, she received only minor entry and exit burns from the current. Had she followed the proper procedure; this incident would not have happened.

HOW TO PROTECT YOURSELF

When working on energized electrical equipment, remember the following important tips:

- Never attempt to work on any energized equipment unless you have been specifically trained, qualified and authorized to do so.
- Always follow established standard operating procedures.

- Never take shortcuts. It takes only a fraction of a second for a mistake to cause serious injury.
- When testing electrical parts, use a meter whenever possible and be aware of what you are grounded to.
- Use rubber matting to cover the floor and exposed electrical conduits not being tested. This will minimize grounding and possible contact with energized parts.
- Use the correct personal protective equipment (PPE): non-conducting gloves, shoes, safety glasses and other clothing. Never wear jewelry when working around electrical current.

FINAL WORD

Procedures, policies and rules are in place and are specifically designed to prevent electrical shock and other injuries. If we take shortcuts, get in a hurry or just don’t follow the rules, eventually an injury will result. Always follow all established operating procedures when performing any task.