## **5-MINUTE HIGH IMPACT**

# **ELECTRICAL SAFETY**

ORDER CODE 4407

## INTRODUCTION

Three-fourths of all electrical accidents, including 100 deaths annually, are caused by unsafe work practices. Electricity, like our decision-making process, has the power to create or destroy. Unlike our ability to think, electricity knows only to find the shortest path to ground and complete the circuit.

This video features two accident recreations to motivate your employees to follow safe work practices when working with and around electrical hazards.

## PROGRAM OUTLINE

# Improper Proper Grounding Procedures Results In Electrocution

Jarvis Bunt decided to repair an extension cord with a crushed plug. Jarvis found a new end piece and put it on the cord. He mistakenly connected the hot wire to the ground terminal. When his co-worker Alvin Potter used the cord to power a circular saw, he was electrocuted and the saw blade buried in his leg.

LESSONS: You must be qualified to do any electrical job. Jarvis was unauthorized to repair the cord. He did not understand why each of the three wires must be connected to a specific terminal.

### **QUALIFIED ELECTRICIANS**

- To be qualified not only means that you are an electrician, but that you have received additional training on the specific tasks that you will undertake in certain locations.
- You must understand the construction and operation of the equipment.
- You must also have the skills and techniques to recognize exposed elements.
- You must be able to determine the voltages that you will be exposed to and the proper clearance distances for these voltages.
- When servicing equipment, always use the safest method possible to control all electrical hazards.

## Failure to Use Proper Lockout Procedure Results in Worker's Death

Charles Sweet, maintenance electrician, was working on a 440-volt, 200-amp electric heater on a production machine. He turned off the power, but didn't lock it out. His supervisor came to help locate the problem and thought he heard Charles throw the disconnect switch. When he did, Charles was electrocuted and killed instantly.

LESSONS: Lockout of electrical power sources is vital when electrical safety is concerned. It's also required by OSHA when you are servicing or maintaining this type of equipment.

#### **BASIC ELECTRICAL SAFETY TIPS**

- You should know and understand the hazards of your job at all times.
- You must understand how equipment and circuits function as well as the operation of this equipment in its environment.
- You must have the necessary training, skills and techniques to perform electrical operations.
- It's our own commitment to personal safety that follows the path to least resistance.