Weekly Safety Topic | Power Tools

Introduction Discussion

Review all accidents and “near misses” in the past week.

Purpose

The purpose of this topic is to cover the hazards involved with the use of power tools.

General Discussion

Based on the type of tools you use, discuss possible scenarios that could create a hazard in your work environment.

Note

Even though power tools are common in most workplaces, they can still be very dangerous. Everyone knows that a mishandled circular saw can lop off fingers, but many power tools are also powered by electricity and so pose the risk of shock or electrocution.

It is critical that workers understand the electrical hazards involved in working with power tools and safeguard themselves from injuries by taking the proper precautions.

EXAMPLE

A man was using an electric power drill on a piece of wood. It was an old drill he had recently inherited when his battery power drill was stolen. He failed to properly inspect the cord leading to the power supply for cuts and did not notice the exposed wires. When moving around his work space he accidentally ran his cord through a small puddle of water and electrocuted himself.

Wet Weather

The combination of electric power tools and wet weather is never a good combination. Using power tools in wet or rainy weather often leads to serious and sometimes fatal injuries. A ground fault circuit interrupter (GFCI) should always be used unless you are plugged into a permanent GFCI plug.

Good Work Practices

a) Inspect tools, power cords and electrical fittings for damage prior to each use. Repair or replace damaged equipment.

b) Disconnect the power supply from the tool before making adjustments.

c) Make sure tools are either properly grounded or double-insulated. Grounded tools must have a three-wire cord with a three-prong plug. This plug must be plugged into a properly grounded three pole outlet.

d) Don’t break off the third (ground) prong on a plug.

e) Extension cord plugs should always be replaced by a plug of equal or greater insulation properties and installed by a qualified individual.

f) Don’t bypass the tools ON/OFF switch by connecting and disconnecting the power cord.

g) Suspend power cords over walkways or working areas wherever possible to eliminate tripping hazards.

h) Don't use extension cords as permanent wiring. They must only be used to temporarily supply power to an area that doesn't have a power outlet.

i) Don't allow vehicles or equipment to pass over unprotected power cords. Cords should be put into electrical conduits or protected by placing them between two pieces of lumber of suitable strength.

j) Keep power cords away from heat, water and oil.

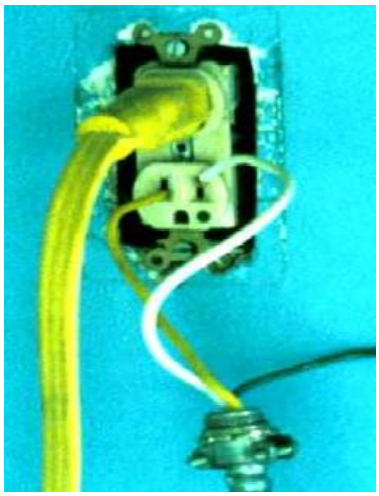
k) Don't use light-duty power cords for heavy load applications. (never less than number #14)

l) Don't carry electrical tools by their power cords.

m) Don't disconnect the power supply by pulling or jerking the cord from the outlet. Pulling the cord rather than the plug may result in electric shock and can damage the wiring inside the cord.

n) Don't tie knots in power cords. Knots can cause short circuits and electric shocks. Loop the cords or use a twist lock plug.

o) Don't overload the circuit by plugging several power cords into one outlet.



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Site Name		Date	

Weekly Safety Topic "Power Tools and Electricity" Quiz

1. Carrying electrical tools by the power cord does not create a hazard.
   a. True
   b. False
2. It is correct to plug several electrical tools into one socket.
   a. True
   b. False
3. An electrical cord does not get damaged by continual vehicle traffic.
   a. True
   b. False
4. It is correct to use a tool with the ground terminal cut off the plug.
   a. True
   b. False
5. When using an extension cord on an outside standard plug to operate an electrical tool you should always use a GFCI in the system.
   a. True
   b. False

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Name Printed	Signature / Initials

Supervisor Printed		Supervisor Signature	