

SEPTEMBER Safety Talk

Topic: Electrical Equipment & Extension Cords

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We all use electrical cords and extension cords every day, and often modify them to suit our needs.

Frayed and damaged power cords and cords that have had their ground prong removed pose a significant risk to workers.



Power cords become frayed or damaged from heavy use and age and should be inspected regularly.

Pulling a plug from a socket by jerking the cord rather than grasping the plug to remove it, causes significant damage over time, tearing the protective external sheathing or detaching it from the plug head and exposing energized wires.



Cords that have had the ground prong removed, to make the cord fit into a nongrounded end, can pose a significant electrocution risk.



Always inspect cords before using. If there is any indication of damage, remove that piece of equipment or extension cord from use.

Do not use electrical cords which are damaged, missing the electrical ground, or in knots (the wires inside the sheath could be damaged).

When using an electrical tool in a wet area, use a Ground Fault Circuit Interrupter (GFCI). These protect you from electric shock; if ground fault is detected, the GFCI shuts off the electricity in 1/40th of a second.



Choosing the correct extension cord is just as important as making sure it isn't damaged. You need to determine what amperage the item is you will be plugging in to the cord to determine which gauge of cord you need.

Examples of amperage limits:

16g = 10 amps 14g = 15 amps 12g = 20 amps



Many things you would plug into an

extension cord need their full voltage to run properly, and may even be damaged if they don't get the full amount. If you will be running an electrical item that will be close to full load, you need to step up the gauge of the extension cord.

Also, don't think you can just add more extension cords – each connector adds its own resistance to the circuit, so you can end up with more of a voltage drop than you expect.