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Company Name _____ Job Name _____ Date_____

ELECTRICAL PATH TO GROUND MISSING

How many times have you found the ground prong missing from an electrical tool or extension cord? Your answer is probably "Too many". OSHA regulation 1926.404(f)(6) requires that the path to ground from circuits, equipment, and enclosures shall be permanent and continuous. Many times on a construction site, due to the frequency and severity of use, electrical equipment that was originally designed and provided with an electrical path to ground is not capable of transferring 'fault current' to ground because the ground prong has been accidentally or intentionally broken off. The electrical path to ground, sometimes known as the 'ground wire', is provided to transfer the 'fault current' to ground in the event that an exposed part of the piece of equipment is energized by the 'hot' conductor or wire in the system. In the case of an electric drill motor it might be energized by the 'fault current' if the internal windings came in contact with the case. If this happened and the equipment ground was not continuous, the path of least resistance from the drill to the ground would be through the user's body.

The hazards of not having a continuous ground are numerous, including electrical shock with injuries ranging from minor burns to death, and the possibility of a fire or explosion. Electrical shock is often the initiator of other types of injuries, from employees being shocked and failing from elevated places, to others who have been hurt when struck by a hand held tool that was dropped when the user was shocked.

It is important to recognize the value of always inspecting your electrical equipment prior to use for defects, such as ground prongs, frayed cords, cracked tool casings, etc. which indicate that the tool should be taken out of service. And don't forget to mark the defective tool with a tag to prevent another worker from grabbing the tool and using it. Another safety measure is to try to use a double insulated tool whenever possible. These tools protect the user from 'fault current' Double insulated tools must be distinctively marked.

TO PREVENT ELECTRICAL SHOCK AND ASSOCIATED INJURIES USE A QUALIFIED ELECTRICIAN TO MAKE ALL ELECTRICAL REPAIRS.

Safety
Recommendations:_____

Job Specific
Topics:_____

M.S.D.S
Reviewed:_____

Attended By:

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