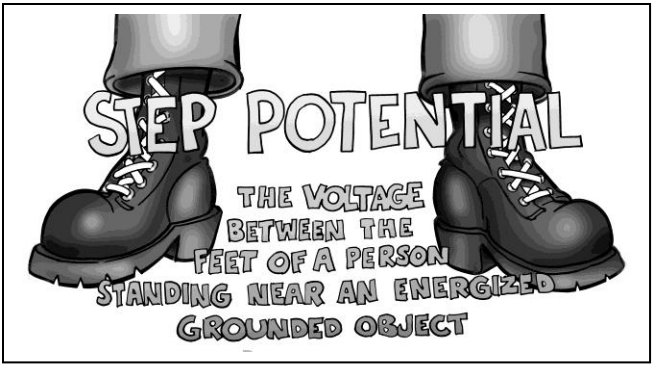
Quick Card

Electrical Step Potential Hazard Avoidance

Step potential is the voltage difference between the feet of a person near an energized, grounded Object. A person on the ground is subjected to the risk of injury during an electrical fault simply by attempting to move toward or away from the grounding point.



Potential Hazard Situations

- Downed wires
- Energized vehicles or tools
- Energized, grounded trees or tree limbs

Hazard Avoidance Practices

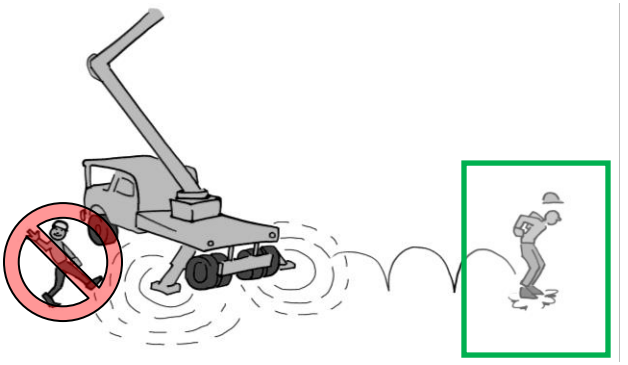
- The employer must assure that each employee has been trained to recognize and is appropriately qualified to work near any electrical hazard that might be encountered at a worksite.
- Tree workers using ladders, platforms, and aerial devices, including insulated aerial devices, are subject to the same minimum approach distances as other tree workers.

Continued on back…

- Aerial devices brought into contact with energized electrical conductors shall be considered energized. Contact with the vehicle and/or any attached equipment such as brush chippers must be avoided.
- Workers must never assume that a conductor lying on the ground is de-energized unless a utility representative on-site has confirmed that it is so.

Escaping Step Potential Hazards

- Use very short, shuffling steps, or move away from the electrical fault keeping both feet close together.
- Avoid taking large steps.
- Avoid direct or indirect contact with any objects as you exit the hazard area.



For Further Information

TCIA: www.tcia.org

OSHA *Tree Care Industry Safety & Health Topics Page:* http://www.osha.gov/SLTC/treecare/index.html

This material was produced under grant SH-22312-11-60-F-33 from the Occupational Safety and Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.