# **Operating Guideline # 310**

## **Electrical Equipment and Generators**



## September 30, 2019

#### PURPOSE:

The purpose of this Operating Guideline (OG) is to establish guidelines to protect personnel from electrical shocks while working with electrical equipment and generators

## **GUIDELINE:**

## General

1. The majority of incidents (shocks, burns, electrocution) involving the use of electrical equipment on the fireground have occurred from improperly maintained tools and electrical cords. All electrical equipment will be checked during monthly equipment maintenance sessions and after each use. These inspections shall include:

a. Electrical cords will be inspected for breaks, splits, cuts and cracks in the outer casing. Any cords found with these hazards shall be repaired immediately or removed from service.

b. Electrical cords with damage to the inner casings or wires shall be replaced.

c. All electrical connectors shall be checked to ensure cords are attached firmly and all prongs and attachments are intact.

d. Tools, lights and their connection cords shall be cleaned and inspected after use.

e. Portable electric lights should have a protective screen over the bulb/glass area.

f. Where the tool/equipment is powered by a re-chargeable battery, fresh batteries are to be installed.

2. Only three-wire or double insulated tools, equipment and cords shall be used. No cords will be used that have had the ground pin removed.

3. Ensure that switches on electric power tools are in the "off" position before plugging them into generators.

4. Always be sure that any portable generator is secure; so it cannot slide or shift around, endangering workers or causing pulls on electrical cords and connections.

5. Do not run electrical cords through water or operate generators in areas of water where to do so would constitute a potential shock hazard to personnel.

6. Electrical generators shall not be connected to a building (where such a building is also supplied by electricity from a local utility) unless the building is equipped with a manual transfer switch between the electric utility meter and the building's distribution panel.

7. Any equipment that is found to be defective or in need of repair should be taken out of service and the Deputy Fire Chief is to be notified.

## **RESPONSIBILITY:**

It is the responsibility of all Emergency Operations Division staff to comply with the provisions of this Operating Guideline.

## **REFERENCES:**

• GN #1-7 Electrical Equipment and Cords