



Product Advisory

PA 0001A

DATE: 10/3/2000
(SAB001)

REVISED: 1/3/23

TO: Owners, Users, Dealers, and Installers

Models Affected: All

SUBJECT: Electrical Continuity Hazard

Issue:

The protection offered by insulated aerial devices and digger derricks is limited, depending on condition and cleanliness. They are a tool that will only reduce the chance of a current flowing from the boom tip to ground through the boom if proper inspection and maintenance is performed. **Failure to follow proper work practice when using the aerial or digger can cause severe injury or death if contact occurs to an energized component.**

What the Owner and User Must Do:

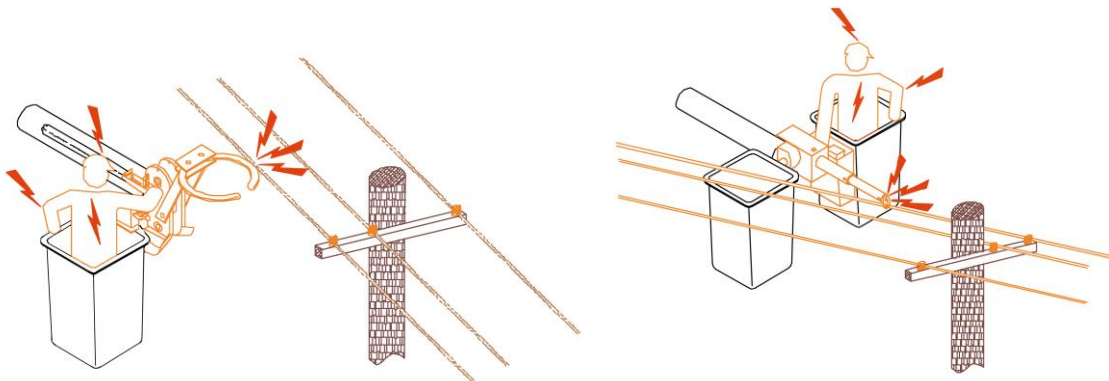
Always wear insulated protective equipment, use conductor cover-ups, and maintain required clearances when in the vicinity of energized conductors.

Aerial devices and digger derricks with insulated booms can only isolate the operator from grounding through the boom to the vehicle. They cannot provide protection against phase-to-phase or phase-to-ground contacts occurring at the boom-tip, above the insulated boom sections.

Boom-tips of aerial devices and digger derricks, of necessity, must contain metal components. Metal conducts electricity. Moreover, under certain circumstances, and to varying degrees, electricity will track across or through non-metallic components (fiberglass covers, jibs, load lines, and structures, hoses, etc.). Electricity can even arc through air. Thus, **the boom-tip of an aerial device or a digger derrick must be considered conductive!**

If any part of the boom-tip contacts an energized conductor, the entire boom-tip, including the control handle, must be considered energized.

If any part of the boom-tip contacts a grounded object, the entire boom-tip, including the control handle, must be considered grounded.





Hydraulic fluid is flammable. If electricity flows through the boom-tip, it can cause the hydraulic fluid to burn or to explode. **Contact by any part of the boom-tip with an energized conductor while the boom-tip also is in contact with another energized source or a grounded object can cause the hydraulic fluid at the boom-tip to burn or explode.**

These are among the reasons aerial devices and digger derricks are **never** considered **primary** protection for the operator from electrical contact. **An operator's primary protection comes through use of protective equipment, such as insulated gloves, insulated sleeves, (PPE), conductor cover-up, and maintaining appropriate clearances; Minimum Approach Distance (MAD).**

Note: Only Category A aerial devices, when following all bare hand work practices, will provide primary protection. Otherwise, primary protection is provided by PPE, coverup, and maintaining MAD.

Do not rely on the boom-tip of an aerial device or digger derrick to protect you from an energized conductor or a ground. It cannot do so. This includes jibs and load lines; they are made of non-conductive material but can be contaminated and conductive. Rely, instead, on the only things that can protect you, use of your appropriate protective equipment, inspection and maintenance of your equipment, and appropriate clearance distance.

Only proper training and complying with that training for the tasks the employer assigns can reduce electrical hazards.

Refer to Product Advisory PA 0003 for ways to prevent electrocution.

Recommended action of Owner:

Terex and local industry standards (e.g. ANSI, CSA) requires that the purchaser of a Terex unit report to Terex the model and serial number of each machine and their contact information within 60 days of the sale. Terex also requests the seller provide the name, address, and telephone number of the new owner. Use the Owner Update Form in the manual or website to update the owner status of any of your machines.