ESSENTIAL 29: Aerial and Scissor Lift Safety

Key Takeaways:
– Recognizing different types and uses for aerial and scissor lifts.
– Identifying the hazards of aerial and scissor lift use and operation.
– Being able to correctly choose inspection criteria for a vehicle, lift, and the work surroundings prior to lift operation.
– Knowing safe work practice for operating aerial and scissor lifts.

Course Description
If your team has to complete jobs in high and hard-to-reach workspaces, then you need to make sure your people know how to work at heights safely.

An aerial lift is any vehicle-mounted device that elevates people. Some types of lifts include extendable boom platforms, vertical towers, and scissor lifts. Aerial lifts are useful for many jobs in general industry, such as cleaning, maintenance, or inspection. However, they are most commonly used when you are a painter, HVAC tech, or electrician.

Operating aerial lifts safely requires preventive maintenance and conditioning of machinery, as well as a lot of considerations before even turning on the key, because the majority of aerial lift accidents happen because of a lack of training or inattention.

The most common hazards surrounding aerial lifts are falls, tip-overs, ejections, structural failure, and electrocution. Inexperience with equipment is another common cause of aerial lift accidents. At the very least, you need to be familiar with correct lift operation, how to perform inspections, and knowledge of manufacturers’ requirements.

Things to Remember When Working on Aerial and Scissor Lifts:
– Check that the control labels, switches, and instructions on the console, are marked and legible; it is important to know which direction levers and shifts will take you where, and exactly what happens when you work with other instruments on the console.
– Know each of the lift controls and practice using the lift's functions in a open, level area before heading into the workspace as a warm up.
– Take the combined weight of the workers, tools, and materials into account when calculating the load; exceeding load capacity or boom limits is a dangerous mistake that is easily preventable. Pay attention to the listed limitations.
– Aerial lifts are designed to one job: safely elevate workers and materials. It is not a good idea to take this machinery and try to use it for jobs that should be performed by other industrial equipment. For example, an aerial lift should not be used as a crane.
– Unless the manufacturer's instructions allow it, never ride around in an aerial lift when it is raised or when a boom is extended; it may save time, but this is the most common way accidents happen when working from aerial lifts.
– Another way problem is operating the lower level controls without communicating with the worker in the lift; you have to check to make sure the aerial lift is clear of workers before manipulating those controls, or else you can throw them off balance, or put them into a hazard they may not be aware of.
– Working the equipment beyond vertical or horizontal reach limits stresses aerial lift machinery and can create a special set of problems; the hazards you may normally encounter, like issues of balance and stability, are all worse when you increase the height past the intended limitations. As a rule, the higher you rise in an aerial lift, the more aware you need to be.
– The work environment and exposure to the elements are very important to consider constantly. For example, operating a lift when winds are above a certain speed (recommended by the manufacturer) is inviting trouble.
– The other often overlooked consideration is awareness for the people who may happen to be working below you. In those

circumstances, your activities above may present hazards below, and the activities of those working below can create unforeseen dangers for worker using aerial lifts.

Aerial lift training and situational awareness is so critical for the safe operation of this equipment. Retraining must happen when there is an accident during lift use, a change in workplace hazards involving lifts, when a different lift is introduced, or if an employer sees someone working a lift the wrong way.