BUCKET TRUCK SAFETY

COURSE OUTLINE

- **Have you ever struggled to reach something on a tall shelf?**
  - You stand on your tiptoes, stretch your arms up, and… you still can't get to it.
  - In this case, all you may need is a step stool.
  - But when it comes to jobs that require you to work several feet off the ground, you need a bucket truck.

- **A bucket truck is essentially a utility truck equipped with a boom with a bucket at the end of it.**
  - It helps you reach areas that you otherwise couldn't get to because of their height.

- **There are two main types of bucket trucks…**
  - Articulating.
  - Telescopic.

- **"Articulating" bucket trucks have booms that can bend and pivot.**
  - This allows them to move up, over and around obstacles.

- **"Telescopic" models have straight booms that can only extend outward and upward.**

- **They both have their advantages.**
  - For example, articulating bucket trucks offer more maneuverability than telescopic booms.

- **Some articulating bucket trucks also have "over-center" booms.**
  - So unlike other types of lifts, the boom can extend beyond the center of the truck's gravity.
  - This makes them ideal for working in tight or complex spaces.
  - But telescopic bucket trucks often have higher weight capacities and a greater horizontal reach.

- **Regardless of whether you're using a telescopic or articulating model, when you're going to be working around power lines or other electrical cabling, you'll need an insulated bucket truck.**
  - On these bucket trucks the boom and bucket are made primarily of dielectric fiberglass to prevent electrical currents from flowing through them.

- **Ultimately, the type of bucket truck that you should use depends on the work you'll be doing.**

- **While bucket trucks were originally built for use in agriculture, they are now used widely in a variety of jobs, including…**
  - Electrical and utility work.
  - Signage and lighting installation.
  - Construction and building maintenance.
  - Emergency services such as firefighting.

- **When it comes to bucket trucks, the golden rule is "safety first".**
  - That starts with having a "Safe Use Program".

- **The American National Standards Institute (ANSI) recommends that every program include written plans for…**
  - Site risk assessments.
  - Rescue procedures.
  - Employee training.

- **So before you even think about operating a bucket truck, make sure that you're familiar with your company's Safe Use Program.**
  - If you have any questions about it, don't stay quiet.
  - Ask your supervisor.

- **The next thing you need to do is read your bucket truck's operator's manual.**
  - This is where you'll find the manufacturer's recommendations for operating it safely, as well as the equipment's limitations.

- **Once you're "mentally" ready, it's time to start your pre-trip inspection.**
  - Start with a general "walkaround".

- **Open the hood and check out the engine.**
  - Look for any wear on the belts, low fluid levels, and any leaks or obvious damage.

- **If everything looks good, shut the hood and take a look at the tires.**
  - Make sure their tread is in good condition and that there isn't any debris lodged in them.

- **Next, inspect the bucket and boom.**
  - They should both be cleaned regularly since oil and grease buildup can lead to falls or even fires.
  - Look for any visible damage or loose components as well.

- **If everything appears to be in working order, test the controls to confirm they're functioning properly, including…**
  - The headlights.
  - The "master switch", which can be used for an emergency shutdown.
  - The Power Take-Off (PTO) switch, which allows the truck's engine to power the hydraulic system.
  - The outrigger releases.
  - The upper bucket controls.

- **Once your equipment is good to go, it's time to turn your attention to the environment you'll be operating it in.**
  - Start by checking the ground where the truck will be set up.
  - If you can dig your heel into the ground, it probably isn't a stable enough base for your truck.
  - You'll also want to look around and identify any obstructions on the ground or in the air that could get in your way during the job.

- **When you find a stable and safe site for your truck, you should put up cones and signs to warn anyone nearby to stay back.**
  - This is especially important if you're working on a road or highway.

- **When your pre-trip inspection is complete, it's time to move on to preparing yourself.**
  - Personal protective equipment is essential if you're going to be working in the bucket.

- **At a minimum, you need to wear a harness, a high-visibility vest, and a hard hat or helmet.**
  - You might also need to wear additional PPE, depending on the job you're doing.

- **You may work near power lines or other electrically charged equipment.**
  - In this case, there are some additional precautions you need to take before you operate a bucket truck.
  - Whenever possible, you or your supervisor should contact utility companies to have any nearby power lines de-energized before you begin your work.

- **If that isn't doable, or you're working around other live electrical sources, make sure the bucket you're using is insulated.**
  - You should wear insulated PPE in these situations as well.

- **If there are any parts of the bucket or boom that are not insulated, you must maintain the "minimum approach distance" from any live parts.**
  - You'll find this distance on the label of the equipment you're working on.

- **From electrical work to building maintenance, bucket trucks can be useful for many types of jobs.**
  - But in order to get them done safely, there are a few key things to keep in mind.

- **The truck itself operates a lot like any other truck, but it has some "lower" controls located in the cab that you need to know about.**
  - To the right of the steering wheel, you'll find switches for activating the PTO ("Power Take-Off"), which powers the hydraulic system.
  - Nearby, there's also a brake and a set of override controls that can be used in case of an emergency.

- **The last of the "lower" controls extend the outriggers.**
  - They help to keep the truck stable and should always be deployed before using the bucket.

- **The bucket has its own set of "upper" controls.**
  - There's a joystick that moves it up, down, left, right, inward and outward.
  - There is also an "emergency stop" mechanism.

- **But before you use any "upper controls", you need to sit in the cab and push the emergency brake down.**
  - Many trucks won't let you switch on the PTO until the brake is engaged.

- **Then, head to the outside of the truck to extend the outriggers using the external levers.**
  - This will stabilize the truck before you raise the bucket.

- **If you're going up in the bucket yourself, you should put on…**
  - A harness.
  - A hard hat or helmet.
  - Work boots.

- **Hook your harness up to the safety line at the top of the truck.**
  - Don't skip this step!
  - It could save your life in an emergency.

- **You can then use the bucket controls to lift the boom upward and position it where you need it to be for your job.**

- **Ideally, your work will then go smoothly. But accidents do happen. The most common bucket truck incidents are…**
  - Falls.
  - Roll-overs.
  - Electrocution.

- **The good news is that with proper precautions, many of these accidents are preventable.**

- **For starters, always have both feet planted on the floor of the bucket when you're elevated.**
  - Never sit, lean over, or climb on the edge!

- **When you're positioning the bucket, make smooth, gradual movements.**
  - Avoid any abrupt starts or stops.
  - Unless there's an emergency, no one should be using lower-level controls to move the bucket when someone is in it.

- **The truck itself should also never be in motion when the bucket is elevated.**
  - Especially if there are people in the bucket.
  - Otherwise, you could lose your balance or collide with an overhead obstruction.

- **But even when the truck is stationary, you can hit objects if you're not paying attention to where your bucket is going.**
  - So "track" your path carefully whenever you're adjusting your position.

- **Falling isn't the only hazard you need to worry about.**
  - "Roll-overs" can happen too, especially if the bucket is overloaded.

- **That's why it's crucial to know the weight capacity of the bucket.**
  - It's listed in the operator's manual.
  - Remember to account for yourself, tools, and anything else that you're bringing into the bucket, so you don't exceed its limits.

- **Falling and roll-over accidents are dangerous because of the injuries you can suffer when you hit the ground.**
  - But electrocution can happen when you're still up in the air.

- **Unless you're using an insulated bucket and you are trained for electrical work, you should stay at least 10 feet away from power lines at all times.**
  - If you are unsure about maintaining this distance on your own, work with a spotter on the ground.
  - They can let you know if you're moving too close to the "danger zone".

- **Once the job is complete and it's time to come down, lower the bucket slowly and steadily.**
  - Don't try to exit the bucket until the boom has come to a complete stop.

- **As you watch someone going up in a bucket truck, you might be glad that it isn't you who has to get up that high.**
  - But just because you're working on the ground doesn't mean you don't need to take precautions when you're around bucket trucks.
  - It still requires awareness and caution.

- **For starters, every ground worker should be familiar with the bucket truck's lower controls.**
  - You typically won't use them while the bucket is raised, but knowing how they work could be crucial in an emergency.

- **However unless there is an incident, you shouldn't touch the truck at all when the bucket is elevated.**
  - In fact, you should stay as far away from the aerial work area as possible.

- **There should be safety cones or warning tape around the bucket truck's work area so you can tell exactly how far you should stay away from it.**

- **If you do have to enter the work area, make sure you're wearing the proper personal protective equipment…**
  - A high-visibility vest.
  - Steel-toed boots.
  - A hard hat or helmet.

- **If the truck is moving, stay out of its blind spots.**
  - Even though pedestrians have the right of way, you should proceed with caution.

SUMMARY

- **A bucket truck is a piece of equipment that elevates workers on an aerial platform to do work like building maintenance, electrical repairs, and signage and lighting installation.**

- **There are two types of bucket trucks, "articulating" which can rotate around obstacles, and "telescopic" which can only move straight up and out.**

- **Any company that uses bucket trucks should have a written "Safe Use Program" that covers site risk assessments, rescue plans, and employee training.**

- **Before you operate a bucket truck, you need to complete a "pre-trip inspection" of both the equipment and the environment that you'll be working in.**

- **The "lower controls" of a bucket truck activate the hydraulic system, extend the outriggers, and have an emergency brake. The "upper controls" include a joystick for maneuvering the bucket and an "emergency stop" button.**

- **The most common bucket truck incidents are falls, roll-overs and electrocution. Using safe work practices can help you to avoid these situations.**

- **All ground personnel should maintain a safe distance from bucket trucks and wear personal protective equipment if they enter a truck's "work zone".**

- **Now that you know how to operate and work around bucket trucks safely, you can take your productivity to new "heights" while protecting yourself and your coworkers… every day!**