**Topic 237: Front-end Loader Safety**

**Introduction:** Front-end Loaders are a common piece of heavy equipment found on many job sites. They are used wherever moving or loading large amounts of earth, aggregate material, or debris quickly is necessary. Front-end Loaders are quick, versatile machines that are often operated in areas where ground personnel and vehicular traffic are present. Front-end Loaders are large, extremely powerful machines that may be operated safely by following the general safety requirements for heavy equipment and some rules specific to Front-end Loader operations.

**OSHA Heavy Equipment Requirements that apply to Front-end Loaders:**
- **General repairs** must not be made to powered equipment until workers are protected from movement of equipment or its parts.
- **Before repairs** are made, workers must comply with Lockout/Blockout requirements when applicable.
- **Whenever equipment** operations encroach on a public thoroughfare, a system of traffic controls must be used.
- **Machines must** be equipped with operable service, emergency, and parking brakes.
- **Equipment must** be equipped with roll-over protection (ROPS) and seat belts.
- **Machine must** be equipped with an operating automatic backup alarm of sufficient volume to be heard over usual jobsite noise.
- **Equipment and systems** must be checked for proper operation and condition at the start of each shift.
- **Machine must** be equipped with a manually operated warning device (horn).
- **Dust control measures** are required where dust limits visibility.
- **All cab windows** must be kept clean for maximum visibility. Any cracked or broken windows must be replaced.
- **Turn off engine and allow cooling before re-fueling.**
- **Any pinch points** which pose a threat to the operator during normal operation must be guarded.

**Precautions specific to Front-end Loader operations:**
- **Do not perform** any repairs or maintenance on a loader with the bucket raised unless it is properly blocked.
- **Ensure all controls** are in the neutral position before starting the machine. Keep the machine clean and the operators cab free of clutter. Any tools or personal equipment carried in the cab must be secured. Keep all controls free of dirt, oil, and grease.
- **Keep tires properly inflated,** improper inflation may cause the machine to tip over under load.
- **Keep load** as low as possible while traveling; always reduce speed when making a turn. Keep speeds low on rough terrain.
- **Check for overhead lines** or obstructions before raising the bucket.
- **Do not load trucks,** bins, or equipment with personnel in close proximity.
- **Never use loader bucket** for a man-lift. Do not carry personnel anywhere on the loader or in the cab.
- **Do a walk around** to make sure the area is clear before moving the loader.
- **Do not allow the tires** to spin while picking up or pushing a load.
- **Do not walk,** work, or allow personnel under the bucket of the loader.
- **Do not use** the loader as a battering ram. Raise and lower the bucket smoothly, slow the bucket’s travel before stopping.
- **Use extreme caution** on slopes; do not raise the bucket unless the loader is facing directly up-slope.
- **When raising the bucket up-slope,** do not completely fill the bucket as material may spill over the back of the bucket directly into the cab.
- **When operating around ground personnel** or vehicle traffic, the bucket, after filling, should be struck by tipping the load slightly forward then sharply back to the stop to settle and seat the load and dislodge any loose or excess material that may be dropped during travel.
- **Use extreme caution** when operating near an excavation, the weight of the machine, especially under load, may cause the bank to slough-off.
- **Do not under-cut** a bank which is higher than the machine.

**Conclusion:** Front-end Loaders are manufactured in a variety of sizes, each with its own characteristics for operation. Operators must thoroughly familiarize themselves with the machine they are to operate. Always test run an unfamiliar machine in an open, unpopulated area before attempting to perform work, especially around ground personnel. Follow these guidelines and use common sense and caution for safe Front-end Loader operations.

**Work Site Review**

**Personnel Safety Violations:**

**Employee Signatures:** (My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

Foreman/Supervisor’s Signature:

*These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.*

© Safety Services Company