

Front End Loader Safety Meeting Kit

FRONT END LOADER SAFETY TOOLBOX TALK

Front end loaders are one of the most commonly used types of heavy equipment. These machines are found in a variety of industries completing a magnitude of different tasks. These machines may not be the largest or viewed as the most hazardous on a job but still are responsible for injuries and deaths year in and year out.

HAZARDS CREATED BY FRONT END LOADER OPERATION

Common types of front-end loader incidents that can result in serious injuries or fatalities are struck-by incidents, caught-in or between incidents, and tip-overs.

Struck- by incidents- Many of the fatalities listed on OSHA's database were a result of a struck-by incident. All too often ground personnel find themselves in a blind spot and an operator will strike them with the loader. Also, the load carried by a front-end loader can strike personnel on the ground causing serious injuries.

Caught-in or between- Similar to struck-by incidents, caught-in or between incidents are responsible for many injuries and fatalities. Workers can find themselves pinned in between the front end loader and another object such as a wall. The load the machine is carrying or working underneath the attachment in the front of the machine can also create an incident where a worker suffers a caught-in or between injury.

Tip-overs- When a front loader is operated outside of its design limits or in an unsafe way, they are susceptible to tip-over incidents. Loads that are too heavy, uneven terrain, and unsafe

speeds are a few common factors for tip-over incidents.

BEST PRACTICES WHILE OPERATING A FRONT END LOADER

- Operate the equipment within its design limits. Read the operator's manual prior to using any front end loader.
- Ensure you have the proper training for the equipment you are using.
- Never overload the equipment. Always use proper lifting and rigging techniques when lifting a load with a front end loader. Travel with loads or attachments low to the ground.
- Setup work areas and tasks in such a way that foot traffic is eliminated or minimized around where heavy equipment is operating.
- Utilize a spotter for tasks when personnel or property can be struck.
- Minimize backing as much as possible. Backing leads to more incidents than when moving forward.

OPERATIONAL PRECAUTIONS

Back Up Cautiously: Accidents occur most frequently when backing. Just because you have a backup alarm on your loader, it is not safe to travel in reverse without concern—for any distance. You must still be aware of your surroundings, use properly adjusted rear-view mirrors and, when lighting is poor, use both front and rear lights. Never throw the engine into reverse without looking behind you. Don't be afraid to use your horn, too. Backup alarms soon become part of the din on a jobsite. If someone ventures into the danger zone around where you are working, sounding a warning blast and stopping would certainly be in order.

Permit No Riders: No one, other than the operator, should ride the equipment. The bouncing and jarring can cause passengers to be thrown off. The usual result is, the passenger is run over. The cage, (the Roll Over Protective Structure) is designed to protect the operator in the event of a rollover. In order to provide this

protection, the operator must be inside the cage, using his seat belt. A passenger is outside and obviously not protected.

Extreme Caution In Pivot Areas: Articulated loaders have a very nasty pinch point at the pivot. Operators should always check both sides of the machine before moving it, to make sure no one is in this dangerous area. If you are the mechanic or oiler, you put yourself at serious risk every time you get in the pivot area. Install the safety bars or links before working in this area of articulated equipment. These will help protect you by preventing the machine from turning.

Overhead Hazards: Be cautious if you are around, between, or under a raised bucket or its arms. When you need to enter these “danger zones,” make sure the machine is shut off. Have the operator step down from the machine and give you the keys. Instruct him to remain off the equipment until you tell him it is all right to remount. Has the bucket lowered to the ground unless the work you plan to do requires that it be raised? Install jacks or blocks under raised buckets or arms so they cannot fall on you if something goes wrong.

Use a front-end loader only for its specific purpose. Never use it for such things as removing fence posts, towing or to knock something down. Never allow people to ride in the bucket. Never walk or work under a raised loader. Raise and lower the loader arms slowly and steadily. Never move or swing a load with people in the work area. If the tractor is to be used in tillage operations, remove the bucket first.

Load the bucket evenly, and avoid overloading to prevent upsets. Do not exceed the load limits listed in the operator’s manual. Keep the bucket low while carrying loads and operating on hills. A hole or sudden bump can easily upset the tractor if the bucket is carried and the rougher the terrain, the greater the danger of an upset.

Travel slowly with front-end loaders filled. Carry the load low, to maintain stability and visibility. However, make sure the load is high enough to avoid contact with the pavement. Be careful when

turning with loads, especially those that may shift or slide. Add extra weight on the rear of the tractor to counter-balance the weight of the load of the front end loader. Check the operator's manual for specific recommendations.

Keep the tractor wheels spread as widely as possible. Avoid using loaders on tricycle-type tractors, because the chances of a sideways upset will increase.

When operating a front-end loader, watch the road or field. Avoid holes, rocks, loose fill or any other obstacle that could upset the tractor. Watch for overhead wire and obstacles when the loader is raised. If working inside buildings, watch for low ceiling beams and doorways to prevent being pinned or crushed between them and the tractor. Also, be sure there is enough ventilation so carbon monoxide from the tractor engine will not build up.

Be very careful when back filling. The weight of the fill material plus the weight of the tractor and loader could cause the new construction of collapse. Avoid undercutting high banks. Watch for falling rocks and cave-ins if a high bank must be undercut. Stay away from the outer edge when working along high banks and slopes.

FINAL WORD

Front end loaders are extremely versatile and useful to have on the job. That being said, they also can be very dangerous to operate or work around. Take the time to evaluate the hazards of the tasks involving front end loader use. Eliminate as many hazards as possible prior to work beginning.