

Preventing Semi-Tractor Driver Injuries during Container Lifting Operations

As shore-side gantry cranes lift containers from semi-tractors in marine terminals, truck drivers may be exposed to injuries from being thrown about the cab unexpectedly, or “jostling.” The jostling of a driver can cause impact injuries, sprains, strains, and back injuries due to the truck cab landing violently and unexpectedly on the ground. Proper training of workers and clear communication during lifting operations are essential in reducing semi-tractor lifting incidents and the injuries associated with jostling.

Jostling incidents occur when containers are lifted while they are still connected (either fully or partially, by the locking mechanism) to the container chassis, causing the semi-tractor to be lifted into the air along with the container. When a semi-tractor is lifted with the container, the locking mechanism on the semi-tractor’s chassis will often disengage in midair. This causes the chassis to freefall and land forcefully on the ground, resulting in the driver being jostled in the cab of their vehicle. In some incidents, semi-tractor drivers have been lifted in their vehicles as high as 30 feet off the ground.

Ways to Prevent Lifting Incidents

Before workers engage in lifting operations, employers must:

- Ensure that any employees who operate cranes are competent to do so (29 CFR 1917.27(a)). Competent crane operators should be trained to properly utilize their line of vision, and understand signals and/or directions from workers on the ground to guide their lifts.
- Ensure that containers are inspected for defects before lifting them (29 CFR 1917.71(g)(1)). Pinmen should be trained to visually inspect container fittings for defects before a container is lifted to ensure that locking pins (“dogs”) will fully disengage and unlock.
- Ensure that containers are not hoisted unless all chassis twist locks are released (29 CFR 1917.71(h)). Workers should be trained to visually confirm that all chassis twist locks are released prior to lifting a container.



Photo: Eagle Marine Services

Semi-tractor with partially disengaged locking mechanism.

In addition, employers should train workers to:

- Maintain clear communication between the signalman and the crane operator during the lift.
- Effectively communicate all transitions to/from chassis and bomb-carts between signalmen and crane operators.
- Ensure that signalmen and semi-tractor drivers understand the importance of the chassis being properly aligned under the crane hook, and that semi-tractor drivers pay particular attention to signals to ensure proper alignment.

- Make sure that crane operators always lift the container slowly and “float the load.”
- Always check that the container and chassis are separated before giving the “all-clear” signal.

If, for any reason, an incident occurs in which the chassis and container are both lifted, the following actions should be taken:

- All “lifting” incidents should be reported to the employer and/or company safety personnel as appropriate.
- Any semi-tractor driver who has experienced “jostling” should be checked for injuries.
- Any chassis involved in a lifting incident should be red tagged and removed from service.

Remember:

Thoroughly training workers, ensuring proper teamwork, and effective communication during lifting operations can help employers to prevent the serious injuries that can result from semi-tractor lifting incidents.

Workers’ Rights

Workers have the right to:

- Working conditions that do not pose a risk of serious harm.
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses.
- File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA’s rules. OSHA will keep all identities confidential.



Photo: Eagle Marine Services

Container is partially disconnected causing the chassis to lift.

- Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For additional information, see [OSHA's Workers page](#).

How to Contact OSHA

For questions or to get information or advice, to report an emergency, fatality, inpatient hospitalization, amputation, or loss of an eye, or to file a confidential complaint, contact your nearest OSHA office, visit www.osha.gov or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

For assistance, contact us. We can help. It's confidential.



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