

Boom Collapse

A boom truck is a type of mobile crane that has a boom to lift heavy items, sometimes onto the truck bed. When a boom truck lifts a load, the boom angle changes, the boom is extended, and the crane's upper deck rotates to swing the load. As these movements occur, the distance from the load's center of gravity to the crane's tipping axis changes, which can lead to instability if the crane's lift capacity is exceeded. The crane can collapse.

Here is an Example

A boom truck crane was being used to lift steel beams to the 4th floor of a building being constructed. The operator misjudged the distance from the crane to the building. The support blocking was not secure enough for the crane to lift and move the steel beams. The crane arm buckled and collapsed dropping the load to the ground. In this incident no one was hurt but the danger to nearby workers as well as to the crane operator was real.

- 1. Are you aware of the proper way to operate a boom truck?
- 2. Are you aware of the safety issues when around a boom truck?

Preventing a Boom Collapse

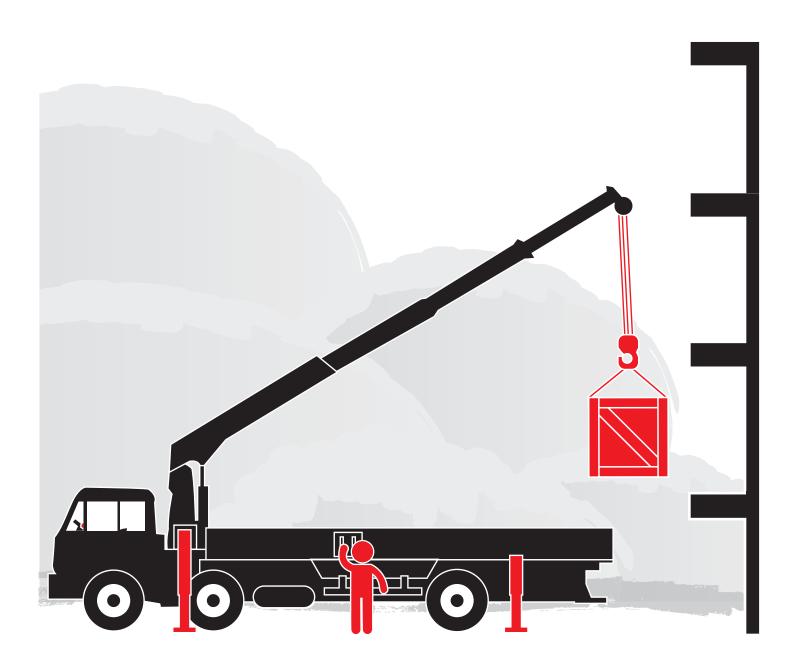
- Check to see that the equipment you are about to operate has been properly inspected and is certified for operation.
- Perform an operational inspection as required for that piece of equipment.
- Never permit an unauthorized person to operate the crane or give the signals.
- Always be sure that the operator and signal persons are in direct and clear view, or in communication by phone.
- Always warn others of moving and approaching overhead loads.
- Always obey warning signs, especially those that are posted in critical areas.
- Always know the weight of the load and rigging to ensure it is within the crane capacity.
- Know the safe wind speed to lift loads.
- Use proper blocking methods to adequately support boom sections during disassembly.

What Are We Going to Do Today?
What will we do here at the worksite today to prevent a boom collapse?
1
2
OSHA REGULATION: 1926.1412 for inspections





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