BOOM TRUCK SAFE WORK PRACTICES

Reviewed May 1, 2015

OH&S CODE PART 6 (SECTIONS 63, 66, 90, 92 & PART 9 Section 156)

A boom truck is a vehicle that has a truck body and a remote articulating arm. It is used to lift objects that do not require a crane.

A. Boom truck safe work practices and procedures

Safe operation of boom trucks is dependent on the operator, the mechanical condition of the unit, and the loads being lifted.

For safe operation of a boom truck, all operating regulations, manufacturer recommendations, maximum load lift capacities, and safe work procedures must be observed.

A load chart must be available and a boom truck equipped with.

Only a worker who is competent and authorized by the employer may operate a boom truck.

Follow these safe work procedures when working with a boom truck:

B. Equipment check procedures

Do a visual check of the entire boom truck:

- 1. Look for cracks, deformity (damage), pools of leaking fluids, or outrigger creep.
- 2. Check that the tires are properly inflated.
- 3. Check the engine oil, radiator coolant, and hydraulic reservoir levels.
- 4. Check the brake lights, flashers, turn signals, headlights, horn, and windshield wipers for proper operation.
- 5. Extend the outriggers and operate the boom through two complete cycles to check the operation of the controls and the hydraulic cylinders.
- 6. Check the load line cable in accordance with the manufacturer's requirements and lubricate where called for.

C. Equipment familiarization practices

A boom truck operator should be thoroughly familiar with a number of aspects of the equipment:

- A. Location and operation of the controls
- B. Correct operating procedure
- C. Maximum lifting capacities
- D. Proper rigging practices
- E. Safety precautions applicable to the unit before operating it
- F. Emergency procedures to be followed in case of equipment failure or accident
- G. Location of emergency procedures

H. Last entries in the equipment logbook

Warning: Lift capacities are greatly reduced if the boom truck is not level.

Note: Maximum loads shown on the boom truck capacity chart are based on a level position of the machine/unit.

D. Positioning practices

Always seek the best possible position when parking the boom truck for work:

- An ideal job site parking location is firm, level, dry ground or thick pavement that will not sag on a hot day
- Avoid uneven terrain, rocky terrain, muddy terrain, steep grades, or locations with unnecessary overhead obstructions such as structures or power lines
- If the unit must be operated on a slope, use outrigger pads or timbers to level the truck
- If the truck must be positioned in an area that is not level, work from the rear of the truck
- If the truck must be used across an incline, always work with the boom on the uphill side of the truck
- Set the truck parking brake securely before using the crane

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Note: Maximum loads shown on the boom truck capacity chart are based on a level position of the machine/unit.

E. Operation practices

Do the following when operating a boom truck:

- a. Make sure all workers stand clear of the outriggers while they are being lowered
- b. Ensure that outriggers are down and on firm ground before using the lifting unit (to ensure stability)
- c. Before operating the boom truck, consult the load chart to ensure that the unit has the capacity for the loads to be lifted
- d. Before lifting a load, ensure that you make straight pulls
- e. Before lifting a load, ensure that the boom and load lines form a straight line to prevent side pulls that can damage the boom and/or tip the unit over
- f. **Do not** allow people to ride on the hook or on loads.
- g. **Do not** move loads over people
- h. **Do not** lift a load until all people are clear
- i. **Do not** allow the hook or load block to pull tight against the boom tip when lowering or extending boom (this can cause the load line to break)
- j. Properly attach the load lines to the winch drum
- k. Make sure at least two wraps remain on the drum at all times
- l. **Do not** modify the machine or add attachments, unless they are manufacturer approved

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- m. Keep the load close to the ground whenever possible
- n. **Do not** operate the crane during electrical storms or high wind conditions
- o. **Do not** perform any maintenance work on the unit unless it is immobilized or blocked up in place
- p. **Do not** attempt service or repair while the crane is operating
- q. **Do not** disconnect hydraulic operating components when there is pressure in them
- r. Maintain at least a ten-foot (3.05m) safety area between the crane tip and any obstructions or power lines
- s. Ensure that maintenance and lubrication is done according to manufacturers specifications
- t. Never reposition or move the unit when the boom is in a raised position

F. Completion of work procedure

After completion of the work, do the following:

- 1. Return the boom to the road travel position
- 2. Make sure that the load line hook is tied down so it cannot swing freely
- 3. Retract the outriggers
- 4. Return the engine throttle to the idle position, depress the clutch, disengage the power take-off, and release the hand brake on the vehicle
- 5. Remove and stow the wheel chocks
- 6. Release the parking brake before moving the unit
- 7. Bring the unit's log book up-to-date by making the daily entry