

Safe Backhoe Operations



A backhoe's danger comes from its combination of weight, power, poor visibility, and potential for operator error. Safe operation requires training, awareness, inspections, communication, and respect for the machine's limits. Operating a backhoe on or near a roadway can be hazardous, and Members are encouraged to provide employees with training before they operate any piece of heavy equipment. Training ensures that each operator is competent to operate the equipment safely. R.O.A.D. Ready (Recognize, Observe, Assess, & Determine) can be used to help improve awareness of hazards and increase equipment operations safety on or near roadways.

1

Before operations, check fluid levels including engine oil, coolant, hydraulic fluid, and fuel. Tires & tracks should be inspected for wear, damage, and proper inflation. Ensure lights, horns, and backup alarms are working. Assess hydraulic hoses for leaks, cracks, or signs of wear. Bucket & boom pins, bushings, and welds should be checked for damage.



2

Know Machine Limitations: Avoid pushing equipment beyond its design limits or lifting capacity. Know your load chart - overloading can cause tip-overs. Machine stability is important, so always deploy stabilizers before digging or lifting. Use proper lifting attachments and never "free lift" materials unsafely. Keep the operator manual in the cab; it's your reference guide.

3

Use situational awareness and stay alert to your environment and potential hazards. Do a 360° walkaround before starting - look for people, power lines, underground utilities, and obstructions. Mark hazards and swing areas with flags or cones. Use a spotter, especially when visibility is limited or in tight quarters. Maintain communication when working around others.



4

Always deploy lower stabilizers until the rear wheels just lift off the ground. This maximizes stability during digging or lifting. Ensure the backhoe is on firm level ground. Use cribbing or mats to create a stable base. Stabilizers can sink into loose or wet ground, so check and adjust often. Never dig without stabilizers down, as it can lead to tipping or loss of control.



5

Operators should call a safety time out if something feels unsafe. Report unsafe behavior or conditions - don't risk an injury. Discuss changes in the work plan or hazards with all persons involved in operations.

LEARN MORE WITH THESE ADDITIONAL RESOURCES:

- TML Risk Pool Training Video Now Work Zone Safety [TrainingVideoNow](#)
- Texas Department of Insurance: [Safety at Work Free Online Safety Videos](#).
- TML Risk Pool [Heavy Equipment Operations T.I.P.S. Sheet](#)