

Safety Measures for Quick-Disconnect Attachment Couplers

Workers who operate or work near hydraulic excavators and backhoe loaders are at risk of being struck by the machine or its components. In addition, there have been 15 reported incidents, including 8 fatalities, of workers being struck by excavator buckets that detached from the excavators because the quick coupler was not properly connected and locked.

Quick couplers used on hydraulic excavators enable operators to quickly make attachment changes. By removing the bucket, a large amount of weight is removed from the excavator and the lifting capacity of the excavator is increased, improving the operator's line of vision during lifting. The quick couplers also allow the operator to change buckets and other attachments quickly.

Safety Procedures for Operators:

- ▲ Get training for the proper use of quick couplers, including procedures for engaging attachments, testing, and visual inspection.
- ▲ Follow all manufacturers' recommendations for maintenance and inspection of quick couplers.
- ▲ Use all required positive locking pins and other locking devices. Never substitute wood, rebar, bolts, or any other material.
- ▲ Be sure you know how to manually install the locking pin if necessary.
- Visually inspect the quick-disconnect system to make sure it is properly locked after changing attachments.
- ▲ Perform an attachment safety check by moving the bucket or attachment through the complete range of motions after each attachment change to ensure the coupler is locked.
- ▲ Inspect all quick-disconnects (couplers) prior to use each day to determine if they are damaged or subject to unexpected release hazards.
- ▲ Decide on a clear signal to stop work immediately

Safety Procedures for All Workers:

- Never stand or work under a raised load.
- ▲ Stay clear of equipment when it is moving.
- Signal the operator to stop work immediately if the coupler is damaged, not properly connected, or locked.

Quick-disconnect attachment couplers have simplified many tasks on the jobsite, and they offer equipment operators greater flexibility. Don't ever take a shortcut on safety, however. Make sure all quick coupling devices are secured properly, and always stay alert for potential hazards.