
HEALTH AND SAFETY ADVISORY

Attachments – Quick Couplers

When not installed or maintained correctly, heavy equipment attachments (various-sized buckets, ripping teeth, hammers, and other tools attached by “quick couplers” instead of traditional “pins”) may release unexpectedly and fall, causing near misses, accidents, injuries, and fatalities. This unexpected release normally happens because the quick coupler is not properly engaged and locked.

Caution

If a quick coupler is not fully engaged and locked or if it is not maintained properly and has loosened or lost tension, it can release unintentionally, causing the attachment to detach and fall.



Manufacturer’s Instructions

To prevent injuries due to falling heavy equipment attachments, employers must ensure that operators do the following.

- ▶ **Comply with the operation manual for the equipment they are using, including quick couplers.**
Equipment operators must always read and follow the manufacturer’s instructions for inspection, routine maintenance, and operation. Employers must verify that operators have been properly trained and are qualified to operate the specific equipment prior to operating the equipment.
- ▶ **Be familiar with their assigned equipment and follow the manufacturer’s instructions as outlined in the operation manual.**
Equipment owners must never change or alter any part of the manufacturer’s equipment without consultation and instruction from the manufacturer.
- ▶ **Maintain equipment as per the maintenance manual and remove equipment from service if it requires any repairs that may pose a hazard to workers.**
According to the construction regulations, operation manuals issued by the manufacturer shall be kept readily available on the project (with the equipment).

Safe Work Practices

- ▶ It is good practice to warm up equipment and ensure it's working properly prior to operation.
- ▶ Operators must follow the recommendations outlined in the construction regulations. They include the following.
 - The operator (who must be a competent worker) must inspect the equipment before each use to make sure that there are no defects or hazardous conditions.
 - A supervisor or a competent person appointed by the supervisor must also inspect the equipment to ensure that it does not endanger a worker.
 - No worker shall operate the equipment unless the worker is competent to do so.
- ▶ Regardless of the type being used, always ensure the quick coupler is locked and secured before use. Some quick couplers are provided with locking pins and others lock automatically and have an indicator in the cab. After it is locked, most manufacturer's instructions require the operator to perform a "ground or bump test". This is done by placing the attachment on the ground and then applying pressure from the equipment on the attachment to ensure that the attachment is secure. Ground or bump tests (even if not part of the manufacturer's instructions) must be performed every time an attachment is changed. This is the only means available for the operator to ensure the attachment is fully engaged and locked in place.
- ▶ Equipment operators must not pass loads or equipment over workers' heads.
- ▶ Workers in the vicinity of heavy equipment such as excavators must stand where the operator can see them and where they have a full view of the intended path of travel. Remember to stay out of the intended path of travel and always make eye contact with the operator before changing position or approaching the cab.

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