

## Safe Use of Quick Hitches on Excavators

In 2012 the NSW Residential Construction Industry claimed 2 lives resulting from excavator buckets detaching from their machines whilst in operation. In both instances the safety pin device that holds the bucket in place against the quick hitch were **NOT installed or engaged**.

Today, a contractor at Woongarra, was found to be holding the safety pin in place with duct tape (*their reason, it keeps falling out*). Work was stopped and they cannot recommence until the Safety Pin is utilised correctly.



# Important Safety Alert



Quick Hitch Safety Pin being inserted

Quick Hitch Safety Pin in place with Lynch Pins and Chain

As such, all Hudson Homes Supervisor are now required to regularly inspect their trades (contractors) excavators and backhoes (which utilise quick hitches) to ensure that safety pins are being used and held in place correctly.

### IMPORTANT

*Plant used on any Hudson Homes site that utilise quick hitch attachments and that are found to be operating without a safety pin installed or engaged properly will be immediately removed from site.*

# Always check that your Safety Pin is engaged !

**Missing 'safety pin' blamed as excavator scoop crushes husband waiting for news of new baby**

*February 7, 2012 Sydney Morning Herald*

A construction worker who died after being crushed by a scoop bucket at a south-west Sydney demolition site yesterday had been waiting for his wife to give birth today or tomorrow, his union says.

The 34-year-old man from Merrylands West was working at a Housing NSW demolition site at Riverside Drive, Airs, where townhouse precincts were being knocked down.

**Teenager killed by falling excavator bucket**

*March 23, 2012 ABC News*

A teenager has died after receiving severe head injuries when an excavator bucket fell on his head in Sydney's south-west.

Emergency services were told the bucket fell from an excavator onto the head of the 17-year-old at Edmondson Park on Thursday morning. He was taken from the excavation site to Liverpool Hospital in a critical condition, also suffering cardiac arrest. He later died.

WorkCover inspectors visited the excavation site and a formal investigation has begun.

Less than a month ago a man in his 30s was killed at Airs, another suburb in south-west Sydney, on a housing demolition site. In that accident the pin which was supposed to stop the bucket coming off the excavator arm was not in place.



# Why did these accidents happen !



The quick hitches involved in these particular incidents were fundamentally the same as the majority of commercially available hitches in use on construction sites across our country. By law, a 'safety pin' was required to be manually inserted by the operator into a bore located behind the swinging jaw each time an implement was fitted. With the pin in place and the hitch in good order, it is physically impossible for either of the jaws to disengage from the bucket pins. Without the pin, the simplest of hydraulic, electrical or mechanical failures can easily result in the attachment detaching itself from the hitch.

That is exactly what Workcover NSW inspectors found after investigating the incident. The operator had neglected to ensure the safety pin was in and in failing to do so had dramatically increased the odds of the implement coming off.

The problem with this design is that it is still reliant on the human element to perform the key function of ensuring that this vital safety measure is in place. On the hierarchy of risk control measures, this is categorised as an administrative measure, one of the last lines of defence.

With a manual and semi-automatic quick hitch, in order to use the quick hitch safety pin correctly, the operator needs to exit the cab once to remove the pin, then again to install it in the new attachment once fitted. Complacency sets in, blokes get lazy and suddenly you've got a qualified and experienced operator taking a deadly gamble with his workmates very existence.

# Manual Quick Hitches

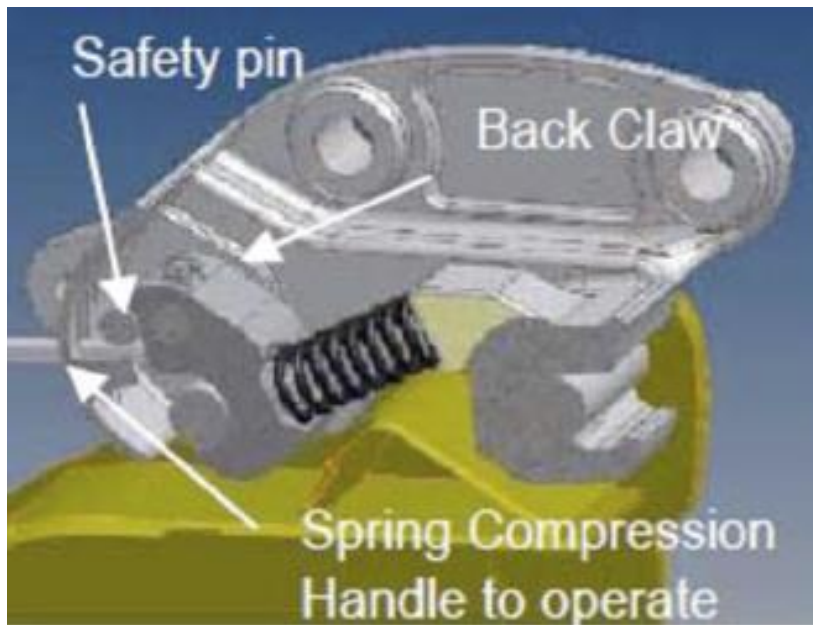


Figure 1 – Spring latch mechanism

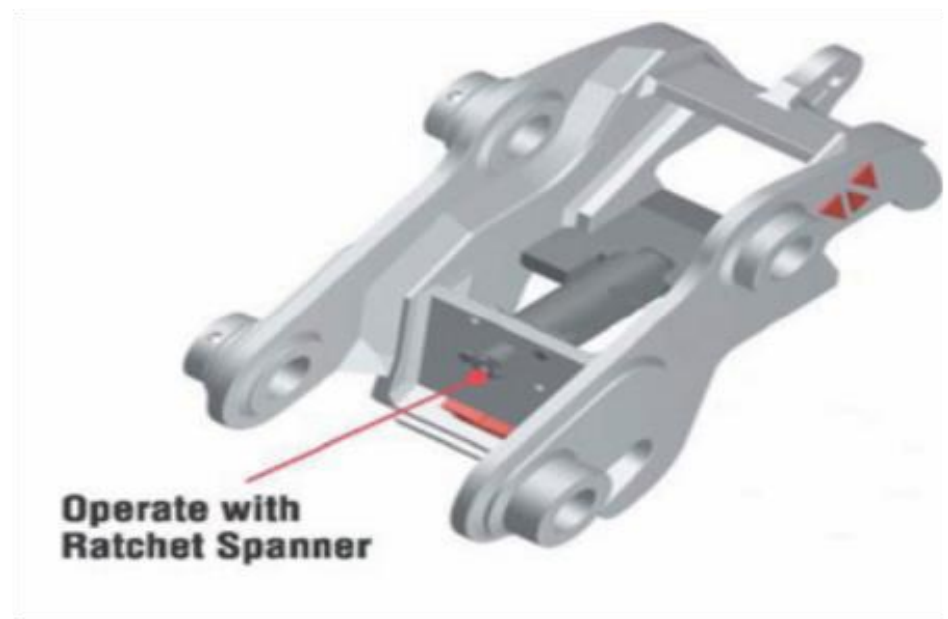


Figure 2 – Ratchet operated mechanism

# Semi Automatic Quick Hitches

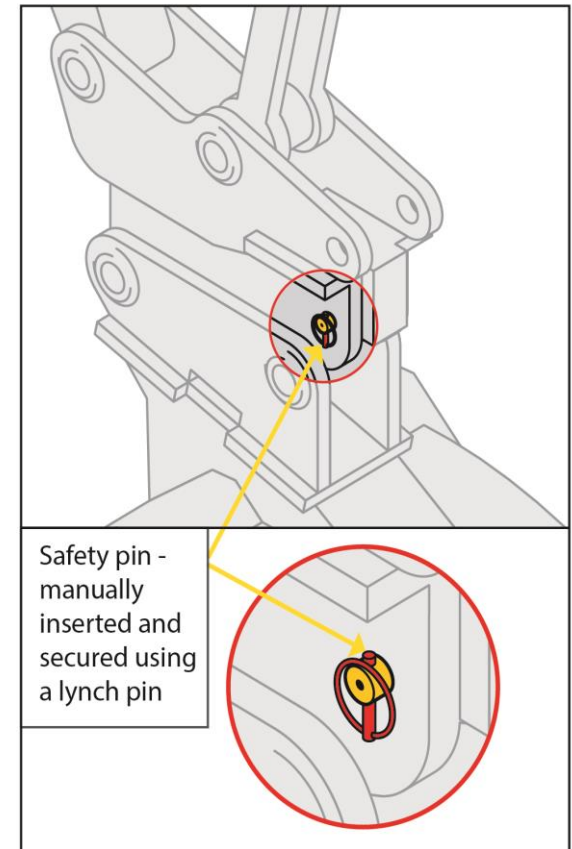
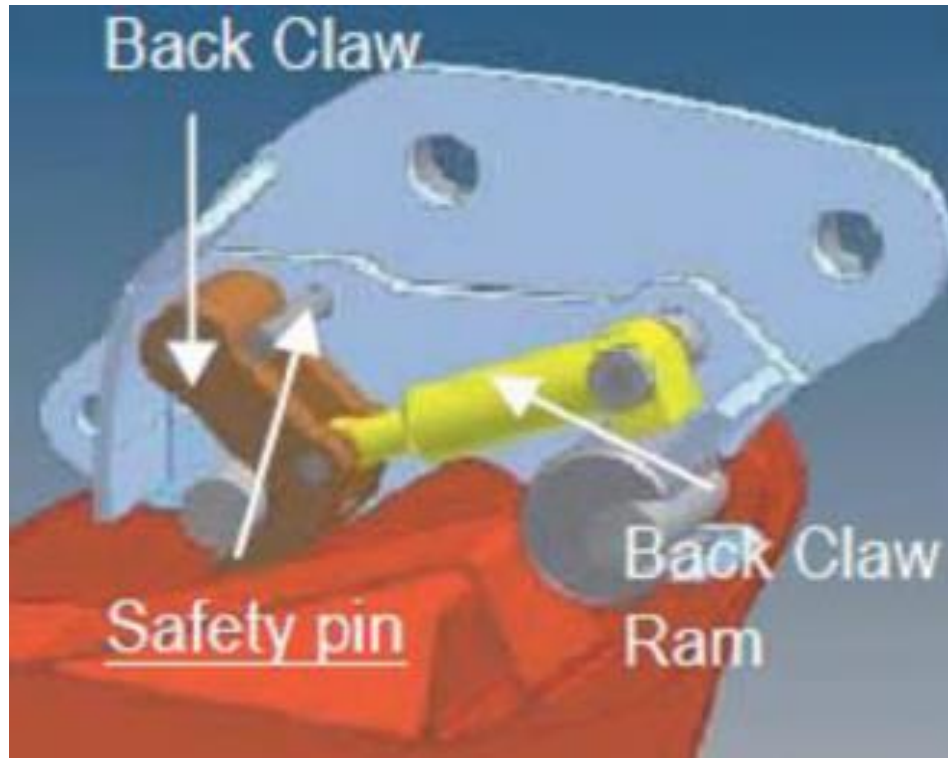


Figure 3 – Semi-automatic quick hitch

# Fully Automatic Quick Hitches

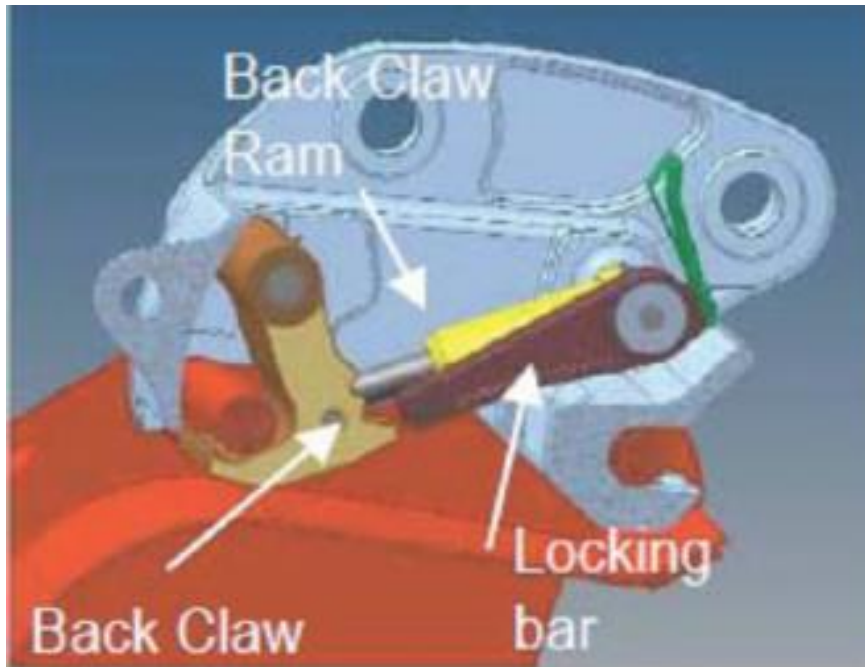


Figure 4 – Single claw lock type

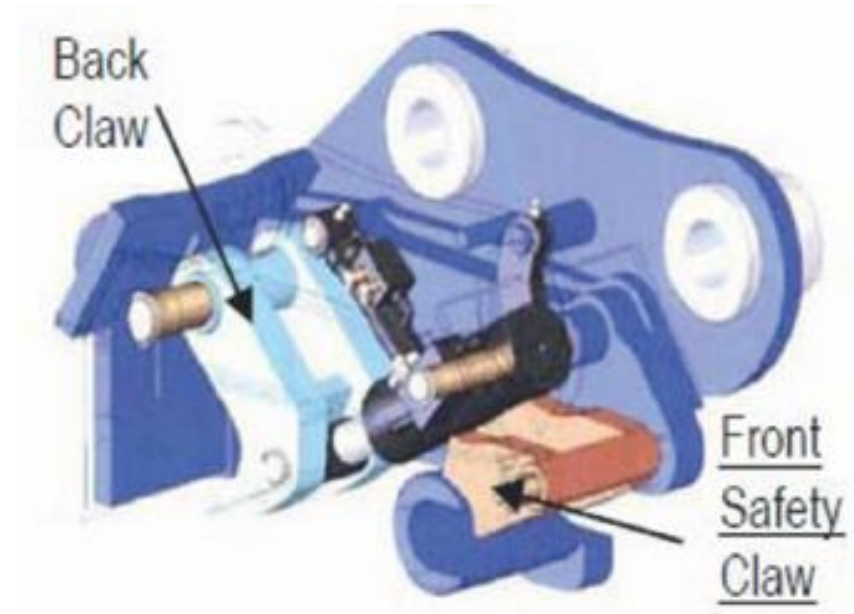


Figure 5 – Double claw lock type

Operator can see the Safety Pin engaged from the Cabin !