

# SAFETY ALERT (ALT-001)

## Fully Automatic Quick-Hitches



### BACKGROUND

A dangerous occurrence involving a tracked excavator fitted with a quick hitch device was recently reported. The machine was being used for breaking concrete and mass excavation works and following the incident an investigation was launched.

The hitch was 'fully automatic' and yet failed to connect to the pins attached to the breaker. The inspection was inconclusive but two possible causes were apparent:

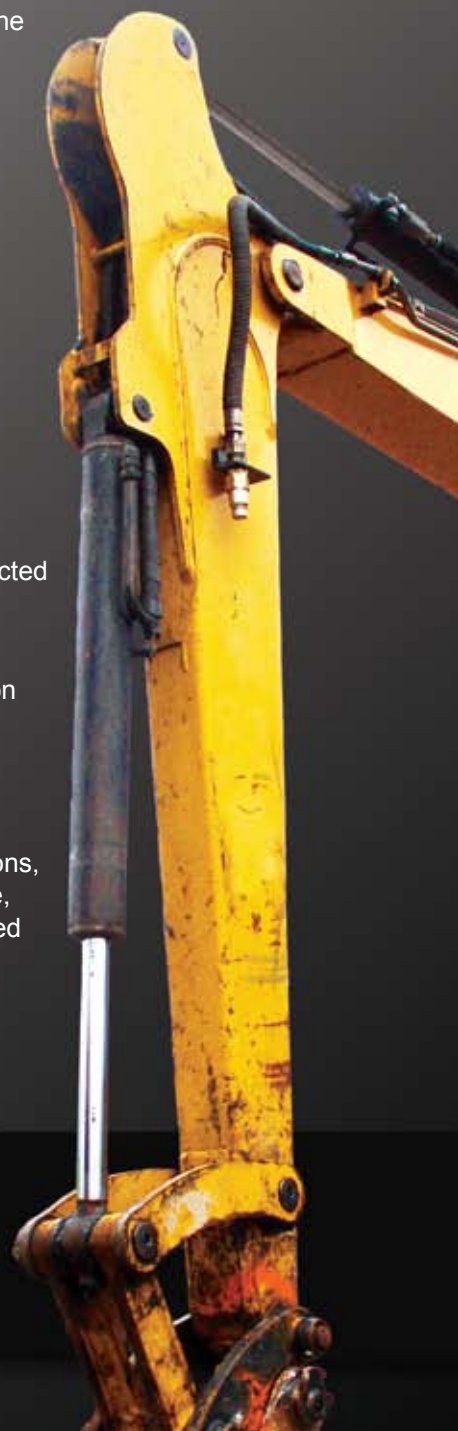
- Either the operator failed to correctly engage the pins before slewing to the point of breakout; or
- Clay and other substrata material prevented the hitch from connecting correctly.

Further investigation also revealed that the retaining bolts (used to hold bucket pins into position) had been sheared off (Image A) and welding around the pins attached to the impact hammer were severely worn (Image B) – both were unsafe and could have contributed to a further incident.



### GUIDANCE

- Although hitches may be manufactured to appropriate standards if abused or neglected by the operator, they can contribute to a dangerous incident.
- All operators (regardless of whether they are hired or employed directly) should check the integrity of components at the start and end of every shift. This information must be recorded by the operator on a daily check sheet or defect report.
- Other workers should be excluded from the operational area of a machine – if they are not there, then they cannot be injured.
- Once an attachment has been fitted to the hitch as per the manufacturer's instructions, it should be tested to ensure that the coupler is connected correctly. Once complete, the machine and attachment should be placed in a safe position, the engine switched off and the attachment checked manually to ensure that it has correctly engaged.
- If in any doubt, then the operator must refer to the machine's operation and maintenance manual (as supplied by the Original Equipment Manufacturer) or the quick hitch manufacturer's information manual/guidance.



# SAFETY ALERT (ALT-001)

## Fully Automatic Quick-Hitches



### BACKGROUND

A dangerous occurrence involving a tracked excavator fitted with a quick hitch device was recently reported. The machine was being used for breaking concrete and mass excavation works and following the incident an investigation was launched.

The hitch was 'fully automatic' and yet failed to connect to the pins attached to the breaker. The inspection was inconclusive but two possible causes were apparent:

- Either the operator failed to correctly engage the pins before slewing to the point of breakout; or
- Clay and other substrata material prevented the hitch from connecting correctly.

Further investigation also revealed that the retaining bolts (used to hold bucket pins into position) had been sheared off (Image A) and welding around the pins attached to the impact hammer were severely worn (Image B) – both were unsafe and could have contributed to a further incident.



### GUIDANCE

- Although hitches may be manufactured to appropriate standards if abused or neglected by the operator, they can contribute to a dangerous incident.
- All operators (regardless of whether they are hired or employed directly) should check the integrity of components at the start and end of every shift. This information must be recorded by the operator on a daily check sheet or defect report.
- Other workers should be excluded from the operational area of a machine – if they are not there, then they cannot be injured.
- Once an attachment has been fitted to the hitch as per the manufacturer's instructions, it should be tested to ensure that the coupler is connected correctly. Once complete, the machine and attachment should be placed in a safe position, the engine switched off and the attachment checked manually to ensure that it has correctly engaged.
- If in any doubt, then the operator must refer to the machine's operation and maintenance manual (as supplied by the Original Equipment Manufacturer) or the quick hitch manufacturer's information manual/guidance.

