



Technical Bulletin / Safety Alert

Unique ID No: GEN2015-TBSA-02

Rev: 0

(This document supersedes all previous versions of the above TBSA – GEN2015-TBSA-02)

Subject: JUG-A-0 Tilt Cylinder Failure

Date: 20th February 2015

Applicable to: All JUG-A-0 UL/UV Machines

Note: Minimum PPE required to carry out any inspections contained in this TBSA shall be protective clothing & footwear, safety glasses, hearing protection & any site specific requirements. A JSA or equivalent should be completed prior to performing these tasks.

Occurance:

A JUG-A-0 Tilt (crowd) cylinder (Part Number 0308-10001) failure occurred recently in a NSW coal mine. The failure occurred through the tilt cylinder rod adjacent to the attachment clevis connected to the MIS (Multi Implement System) Plate and resulted in an uncontrolled lowering of the implement. There were no injuries to personnel.

Investigation & Cause:

An independent failure investigation was completed with regards the tilt cylinder rod failure, which found "*Failure of the tilt cylinder rod occurred by brittle fracture at the toe of the clevis weld as a result of multiple shock loading events to the component. The fracture had originated from a pre-existing crack within the weld toe region through the heat affected zone*" of a previous weld repair.



Recommendations:

1. Tilt cylinder rod and barrel clevises should be included in the Mine/Operator NDT assessment program. VLI recommends a visual inspection on a daily basis and an NDT inspection every 1000 hours.
2. Cracks identified during NDT assessments must be repaired or the tilt cylinder replaced. Welding repairs to the tilt cylinder are not recommended in-situ and should be returned to VLI for repair or replacement.
3. Use of non OEM tilt cylinders is not recommended.
4. Use of VLI approved MIS attachments/implements on JUG-A-0 UL/UV machines is recommended.

Please ensure this document is circulated to all relevant personnel within your organisation.

Should you have any further queries please contact your VLI Representative.

Beresfield 8 Balook Drive Beresfield NSW 2322 P: +61 2 4964 2300 F: +61 2 4028 6796	Mackay 6 Fursden Street Glenella QLD 4740 P: +61 7 4942 7495 F: +61 7 4942 4944	Emerald 44 Industrial Drive Emerald QLD 4720 P: +61 7 4987 5011 F: +61 7 4987 4711	Unanderra 3 Investigator Drive Unanderra NSW 2526 P: +61 2 4220 9400 F: +61 2 4272 5530	Mudgee 24A Industrial Avenue Mudgee NSW 2850 P: +61 2 6372 9847 F:
---	---	--	---	--