

ENGINEERING BULLETIN

Ref Document No.	EB20001	Issue No.	1
Subject	COALTRAM QDS Lock Cylinder Circuit		
Release Date	23 rd January 2020		

Purpose – To advise owners and operators of COALTRAM® machines of a design issue relating to the QDS hitch lock cylinder circuit.

Applicability – All in service COALTRAM® models fitted with Quick-Detachment System (QDS) master hitches.

Background

- It has been identified that under certain conditions it is possible for the QDS cylinder to be retracted by an external force without the hitch release valve being activated.

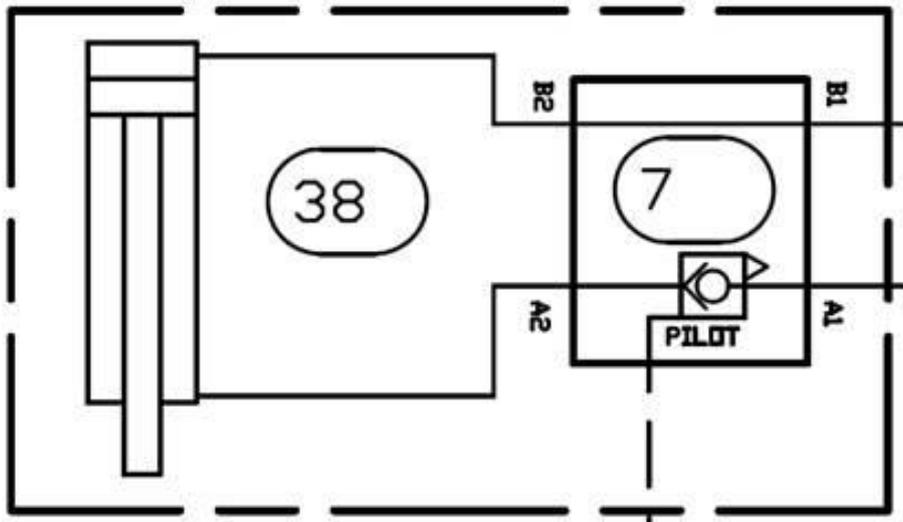


- It was found during testing that with the "third function" joystick activated, an external force pushing on the lock tongue can cause the lock cylinder to retract.
 - In operation, such retraction of the lock cylinder could lead to the unexpected unlocking of an attachment.

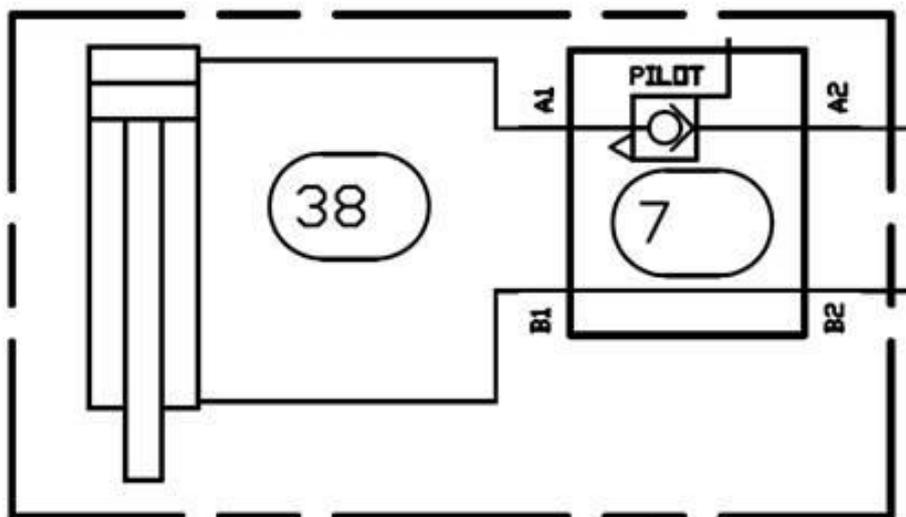
Recommendations

- It is recommended that the QDS lock cylinder circuit be re-hosed such that the load-lock valve is connected to the cap end of the cylinder.

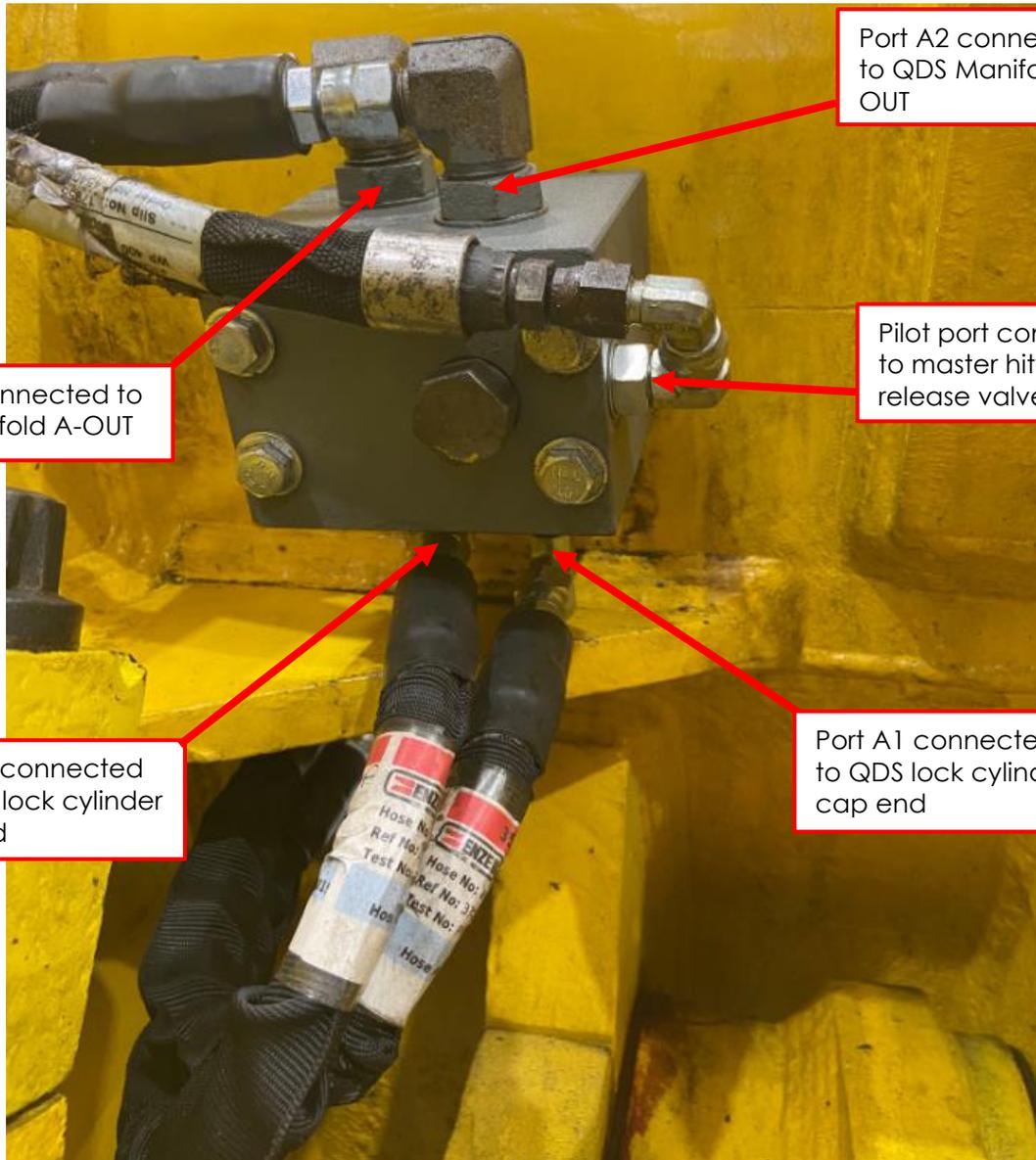
Existing circuit



Revised circuit



Revised Hosing



Port A2 connected to QDS Manifold B-OUT

Pilot port connected to master hitch release valve

Port B2 connected to QDS Manifold A-OUT

Port A1 connected to QDS lock cylinder cap end

Port B1 connected to QDS lock cylinder rod end

The QDS lock cylinder is thus prevented from retracting without activation of the hitch release valve.

- Machine owners are advised to contact PPK for updated machine-specific hydraulic hosing diagrams and schematics.

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