

ENGINEERING BULLETIN

Ref Document No.	EB16001	Issue No.	1
Subject	CT08 and CT10LP Lift Boom Stiffening Plate Upgrade		
Release Date	14 th April 2016		

Purpose – Advise COALTRAM® CT08 and CT10LP owners/operators that an upgrade to the lift boom is now available.

Applicability – COALTRAM® CT08 and CT10LP models

Background

PPK have released an upgrade to the lifting boom on the COALTRAM® CT08 and CT10LP. The upgrade consists of three revised stiffening plates. The upgrade was deemed necessary as some CT08 lifting booms have been detected with cracking at the front inside lift cylinder pockets.

The cracking has low structural detriment, however prolonged inaction could instigate more significant structural failures.

Investigations/Findings

PPK became aware of cracking associated with the lifting boom frame during routine servicing and inspection of the CT08 COALTRAM®. The cracking is fatigue in nature and propagates through the weld boundary between the weld material and parent metal. (Photo1)



Crack at weld boundary

Photo 1

The three upgraded stiffening plates provide additional support to the affected areas.

The boom lift cylinder pockets (Photo 2) cracked through a capping or sealing weld of the existing rolled stiffener. The upgraded stiffener (Photo 3) replaces the existing rolled plate stiffener and fills the void behind.



Existing stiffener (rolled plate)

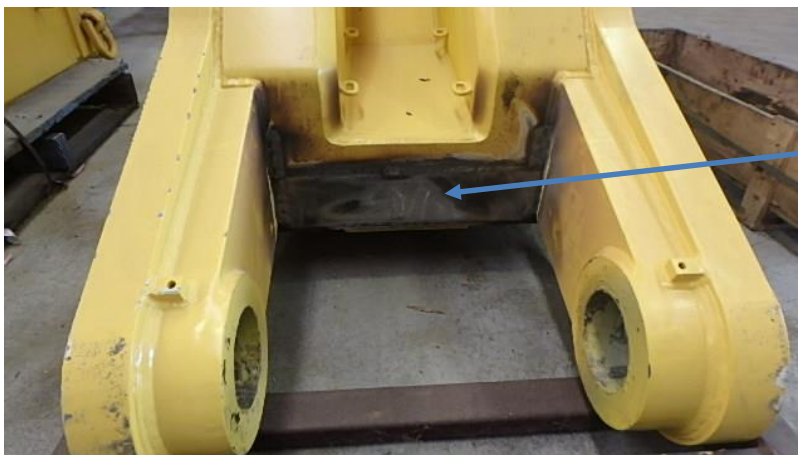


Upgraded stiffener

Photo 2

Photo 3

The addition of the 3rd stiffening plate to the front pivot clevis cross brace is included to further reduce the torsional flex of the structure between the clevises. (Photo 4)



3rd stiffening plate installed

Photo 4

Recommendations

1. PPK recommend that all CT08 and CT10LP COALTRAM® lifting booms are inspected for cracking in the lift cylinder pockets and front pivot clevis cross brace. Specific boom inspections should be scheduled into the next 250 hour service for each vehicle.
2. If cracking is detected repairs should be scheduled and the upgraded stiffening plates installed.
3. Routine inspections for cracks should continue to be conducted as per service sheets.
4. PPK, recommend completing the installation of the stiffening plates in a PPK workshop as the boom requires removal for the installation of the new plates. Stiffening plates required for the upgrade are 2 off – 5520010026 and 1 off – 5520010027.

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