MCQ Lock Adjustment

Front Lock Adjustment
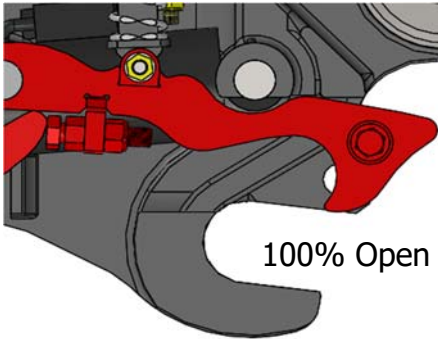

100% Open
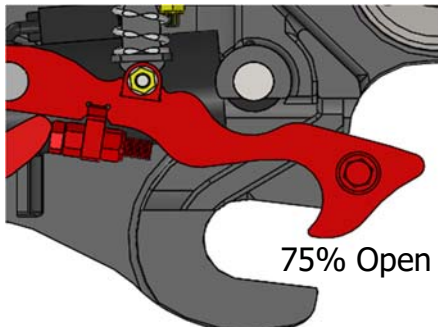
Fig 5

75% Open

Fig 6

Reason for setting at 75%:

Allows a 'clip on' feature where the front lock arm will lock onto an attachment prior to engagement of the rear latch hook.

Reason for setting at 100%:

- Some machine operators prefer that both front & rear locking mechanisms engage with the attachment pins simultaneously.
- This removes the 'clip on' feature of the coupler.

Reason for Adjustment on the Bolt:

- Prior to making any adjustment, make sure the machine is switched off.
- Facilitates switching between the 75% & 100% settings.
- Re-adjust in the case of any wear between the push plate & lock arm adjuster bolt.

How to adjust:

When carrying out an adjustment to the adjuster bolt on the lock arm bolt, it is good practice to cycle the coupler from fully closed to fully open after each adjustment is made. This will enable the operator to identify any interference between the lock arm with the cylinder or the frame of the coupler; Fig 9 possible obstruction.

NOTE: Adjustment of the bolt is such that one full rotation in either direction will cause a substantial increase/decrease in the % opening of the lock arm. As a result only fractions of a rotation of the bolt are required for each adjustment.

Potential Failure Mode

Fig 7 shows the coupler in the over adjusted position.

This occurs when the lock arm adjuster bolt is adjusted clockwise and beyond the 100% open setting.

As a result, the push plate will move the front lock assembly upwards and beyond the 100% open position and it will then make contact with the coupler main frame.

The front lock arm has now made contact with the frame and there is still some stroke remaining in the main hydraulic cylinder. This will cause the full system pressure to act upon the adjuster bolt through the front lock arm.

When this occurs, the adjuster bolt will come under pressure and there is a risk of damage to the adjuster bolt mechanism.
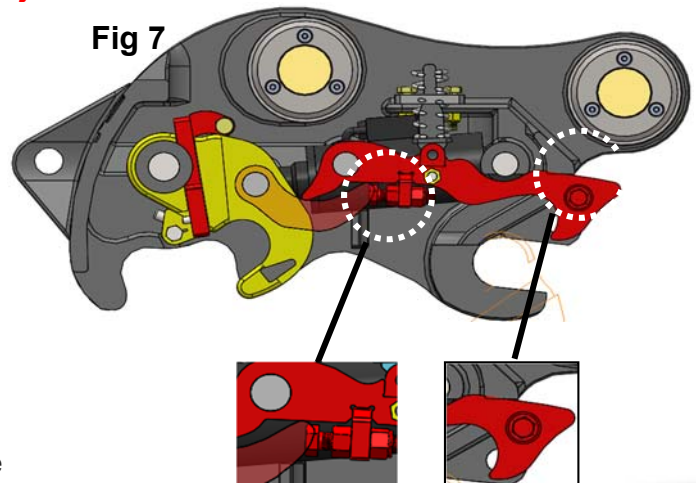
Fig 7