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PRODUCT SAFETY ALERT

Safety Alert No. 1

Subject:

Potential for Handler Lock to not be fully engaged mechanically.

The Handler Lock Assembly by design has two safety features that prevent accidental unlock.

- 1) Mechanical Advantage – The locking mechanism is designed to go to an over-centered position and will remain locked until released.
- 2) Hydraulic Advantage – The hydraulic cylinder has the internal oil pressure locked in place with hydraulic valves.

Product:

All GDM 500 / 650 Ton Top Drives.

Assemblies Affected:

The Handler Lock Assembly located on Service Plate Assembly (A500149)

Issue:

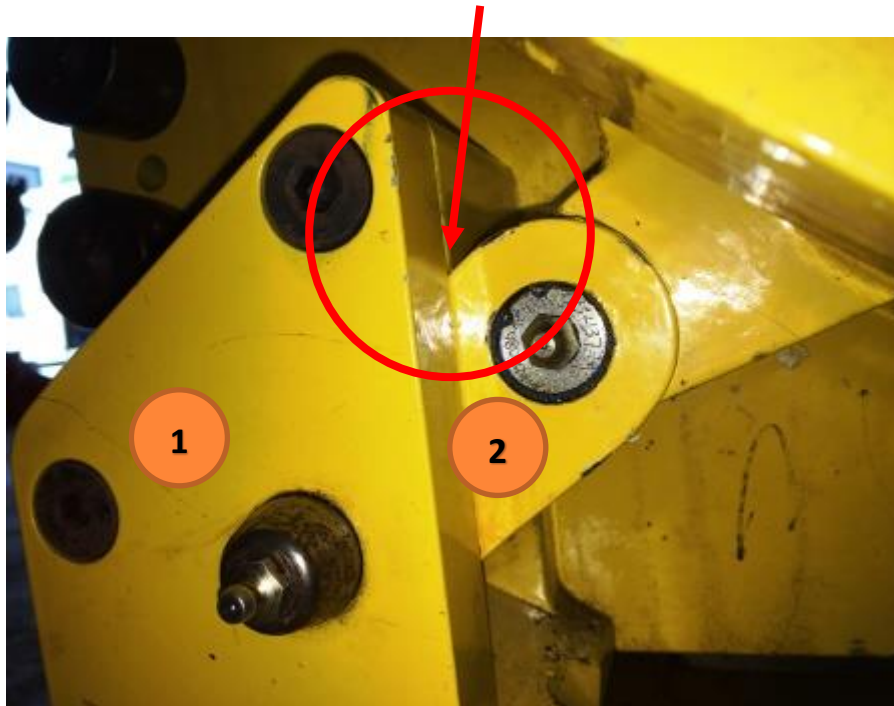
GDS has received a report of an unexpected lock-up and rotation of the Top Drive Link and Back-Up Wrench (BUW) assemblies, which could have caused personal injury and/or peripheral equipment damage.

The rotation occurred due to friction between the Link / BUW assemblies and the Main Shaft or Lower Well Control Valves during drilling. While it has not been determined why the friction occurred, rotation became possible due to the Handler Lock mechanism being not fully locked in the over-center position and the hydraulic pressure being relieved by a ruptured hose.

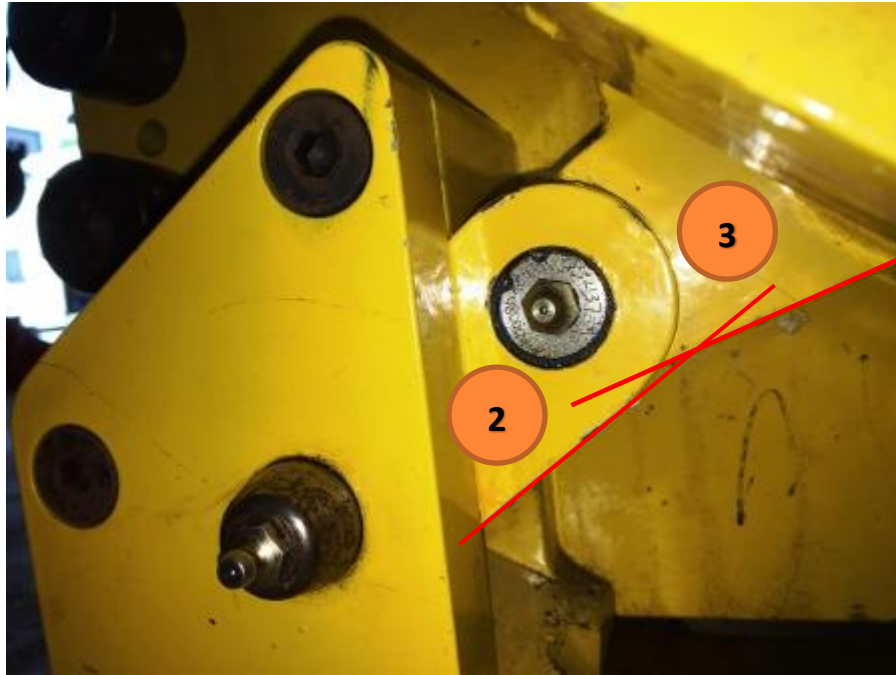
Recommendations:

GDS recommends inspecting the Handler Lock Assembly to insure full movement to the over-center position. The lock mechanism as shown below should touch the mating piece.

- 1) Insure the handler lock mechanism has moved to the full extent of allowable travel. To insure it is in the over-center position, as indicated in the picture below, the Brake Block Link Pivot (2) must be shouldered up against the Link Block (1).



- 2) Visually verify that lever has gone over center by looking at the angles formed by items 2 and 3 and reflected by the two intersecting red lines below.



- 3) Inspect all hoses, fittings, and fasteners to insure assembly is sound.

GDS further and generally recommends that proper top drive alignment with well center be maintained and that all equipment undergo regular maintenance and inspections.

If assistance is required, please contact the GDS Service Department.

Caution:

This Safety Alert is issued for all GDM Top Drives. Not following the recommendations and / or guidance in GDS Product Safety Bulletins may result in death, bodily injury or property damage.