

SAFETY BULLETIN

Ref Document No.	SB19001	Issue No.	1
Subject	RAMBOR® Longwall Face Drill Leg Clamp		
Release Date	28-06-2019		

Purpose

To advise owners and operators of an incident involving a RAMBOR® Longwall Face Drill (LFD). Additionally, to provide recommendations around installation/use of LFDs and advise of further actions being undertaken by PPK.

Applicability

- RAMBOR® Longwall Face Drill 1.3m & 70mm motor (P/No **0010-7001**)
- RAMBOR® Longwall Face Drill 1.3m & 95mm motor (P/No **0010-9505**)
- RAMBOR® Longwall Face Drill 1.7m & 70mm motor (P/No **0010-7003**)
- RAMBOR® Longwall Face Drill 1.7m & 95mm motor (P/No **0010-9507**)
- All Drill Rigs which utilise leg pivot clamps P/No **0280-0002 or similar**

Background

PPK Mining have been made aware of an incident where a Longwall Face Drill leg slipped in its leg clamp while it was drilling into the longwall face.

Investigation /Findings

A contributing factor that could cause the leg clamps to lose grip on the LFD leg is that the M8 x 35 Socket Head Cap Screws which are used to tighten the leg clamps are not tightened adequately.

It also needs to be checked that these bolts are of grade 12.9



PPK has conducted testing to confirm that the clamp arrangement provides sufficient grip when the clamp screws are of correct grade and tightened to the recommended torque of 45Nm. It was found that more than 4000kg-f was required to start pushing the longwall drill leg out of the clamp. The maximum thrust provided by the longwall drill is approximately 1134kg-f. Rubber inserts in the clamp prevented the longwall drill leg from moving at a high velocity.

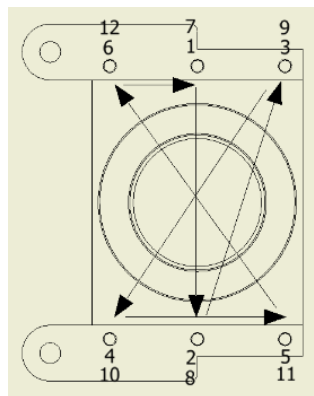
Further Actions from PPK

1. PPK will update the workshop manual to include the grade of the clamp retaining bolts and recommended tightening torques.
2. A bolt tightening pattern will also be included in the workshop manual.
3. A secondary retention device is under development which can be fitted as an added safety measure.

Recommendations

Owners/operators should ensure:

1. The 0280-0002 clamp is secured using the recommended six M8 x 35 grade 12.9 bolts tightened to the recommended torque of 45Nm.
2. Clamp retaining bolts are secured using Nyloc nuts.
3. Clamp retaining bolts are tightened to the recommended torque using the tightening sequence below:



4. Exclusion zones around the LFD during operation are reviewed.

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