

Safety Flash A12-03



Issued: 15th February 2012 Subject: Hand injury

The Injured Person (IP) was carrying out camshaft inspections on a Main Engine. Whilst moving the turning gear wheel to enable visual inspection, the wheel was found to be sticking somewhat.

A pair of multi-grip type adjustable pliers was sourced to enable more leverage and grip to free up the movement of turning gear knob. As force was applied, either the grips slipped or the wheel turned; this caused the IP's right hand index knuckle to come in contact with an aluminum guard.

The cut injury sustained appeared quite deep and was in proximity to tendons around the right hand knuckle. The IP presented to Chief Officer in change room who sourced gauze to stem blood. The IP then presented to the Master whom made the decision to seek medical opinion.

IP was sent for assessment ashore due to the size and depth and proximity to the right index finger knuckle.



Turning Wheel



Machinery Space for cam shaft inspection



Re-enactment of the point of impact

Initial Findings

Organisation

- Immediate Cause

Job Plan never identified risk of hand injury

- Barrier missing/defeated or bypassed

No control measures put in place

- Underlying Cause(s)

Turning gear wheel did not turn fluently may have been used to move hands from impact zone

Environment

- Immediate Cause

Tight work area which is down low with a lot of square steel edges

- Barrier missing/defeated or bypassed

No control measure put in place in risk assessment

- Underlying Cause(s)

E/Room Design

People

- Immediate Cause

when leverage was sought to turn the wheel there was no step back 5 x 5 made to reflect changes made

- Barrier missing/defeated or bypassed

PPE was missing and a longer set of multi grips eliminating risk

- Underlying Cause(s)

Didn't foresee risk

Technology

- Immediate Cause

No recommended tool for this task that will enable operator to carry out from a reasonable height with hands well clear of area

- Barrier missing/defeated or bypassed

No defined tool or procedure for when wheel does not freely turn by hand

- Underlying Cause(s)

Has never been identified as a risk and requiring control measures put in place

Suggested actions to members are:

- Use the right tool for the job – a 'correct' tool has been made for the job, which is a bar that fits into (a pre-existing hole on) the original handle.
- Review the SJA/JSA and adjust accordingly to encompass use of the tool.