

Marine Safety Flash

A15-16 (15th July)



Tow Pins Residual Pressure

Incident Overview

The purpose of this Safety Flash is to share lessons learnt from recent incidents that have occurred whilst greasing towing pins, due to residual pressure within the tow pin.

The first incident occurred when the grease nipple failed and the residual pressure vented through the nipple, blasting the grease gun off the nipple and whipping the IR on the wrist. This was attributed at the time to a grease nipple failure.

The second incident occurred when an IR attempted to remove the vent plug, the residual pressure within the tow pin blasted the plug out, striking his wrist and sending the plug and allen key overboard. The impact resulted in a soft tissue injury and a sprained wrist



Key Findings

Due to their design, one can never be 100% certain that there is no residual pressure remaining within the tow pin (even after a period a month or more). This is a closed system, and there are times when pressure can build up within the lubrication chamber. There is no indication of any pressure and pressure is only released once the vent plug is removed.

Recommendations

In order to mitigate the stored energy hazard, management have consulted with the manufacturer and engineered a solution by modifying the vent plug on the tow pin. The modification allows pressure to be vented, prior to the complete removal of the plug from the tow pin. Feedback on the modified vent plug has been good, so now all vessels in their fleet have been asked to complete this modification to the towing pin's vent plugs.

The modification involves drilling a hole, half way through, in the centre of the base of the plug and then another hole that meets it at 90° (as pictured).