

Palfinger Marine Service Letter

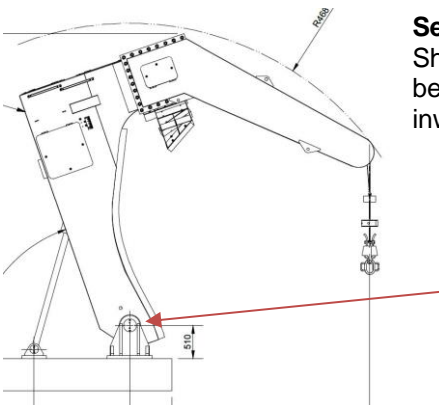
Subject: Davit type NPD 11300H and NPD 14800H

Palfinger Marine is committed to safety of the products. All Palfinger Marine systems are approved and tested according to the latest relevant regulations. Functionality of the Palfinger products is ensured through correct production and certification, correct delivery, and correct installation. Palfinger Marine offers also the additional service of supervision aboard during installation to secure a correct installation if requested.

Incident:

A defect (picture 1, sketch 1) was found during the annual maintenance of a Lifeboat davit on a vessel. During scheduled maintenance it was discovered that one of the davit arm pivot pins had become detached from its retaining plate which allowed the pin to work its way out of its position. Palfinger Marine has found out that alignment of the pivot points between deck and davit can become fundamental in case of deck misalignments which are having an effect on the aligned pivot point positions during regularly operation of the davit system.

This observation is the reason for Palfinger Marine to inform and offer a suitable approach and potential solution.



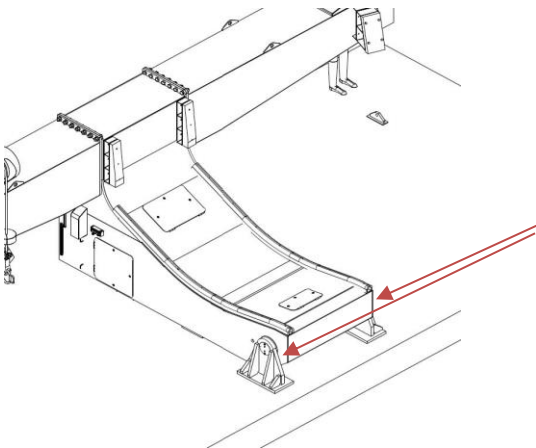
Sketch 1

Sequence of events as reviewed:

Shaft started to rotate due to increased friction of the misalignment, bearing broke, bolts of shaft securing plate broke as a result, shaft moved inwards.



Picture 1: Pin retaining bolts sheared, Pin has moved 30mm into 50mm foot plate.



Sketch 2

Safety warning:

Due to the design and functionality of the davit system the davit stool is attached with two hinges to the deck, turning via their shafts, if one became loose the davit might collapse during operation!

It is mandatory to stop an operation of the davit if a detached or loose securing plate has been detected! The root cause must be evaluated, and a repair must be carried out! In case a certified technician is requested, Palfinger need to be informed!

A check to be carried out:

To be sure that the pivot points between deck and davit are in good condition, extra attention should be given to these pivot points during the regular maintenance checks as described in the manual.

See sketch 1 & 3: Pivot point construction.

A pivot point consists out of a plate welded to the deck, a shaft through this plate into the davit and a bearing in the davit.

The shaft (sketch 2) is locked with a locking plate (right side, sketch 2) towards the plate on the deck.

- Remove the locking plate.
- Check if shaft is completely flush with plate → see sketch 2.
- Put back locking plate.

When the shaft is **not flush** with the davit side, the securing bolts are stressed due to the alignment between deck and davit is not constantly within tolerances during operation of the davit.

Countermeasure in case a misalignment has been detected:

If the shaft is flush with the plate, there is no reason to do any modification, provided that this check is done regularly.

When thorough, regular inspection is not optional, the following 2 options are possible:

- a modification can be done on the locking plate: *drill a hole in the locking plate for easy visual inspection*, when in doubt about this option, contact your local Palfinger Marine Service Station
- an upgrade kit can be ordered via your local Palfinger station, containing a new type of shaft which has a welded securing plate already installed.

In case of doubt, please contact your local Palfinger Marine Service Station.