

Action code: AT FIRST OPPORTUNITY

**ME-B Hydraulic Power Supply**

Exchange of Spiders

SL2016-617/HDP  
June 2016

**Concerns**

Owners and operators of MAN B&W two-stroke marine diesel engines. Type: ME-B engines with hydraulic pump size of either: 40 ccm, 46 ccm, 50 ccm or 63 ccm of Parker or Bosch make.

**Summary**

The spider of the couplings connecting the electric motors and hydraulic pumps on the HPS on ME-B engines may wear out prematurely.

Dear Sirs

To increase the safety and wear margin of the couplings connecting the electric motors and pumps on the ME-B hydraulic power supply (HPS), we have decided to upgrade the coupling spiders on a selected group of designs.

This Service Letter describes which couplings need to be upgraded and how owners can identify the couplings that should be upgraded.

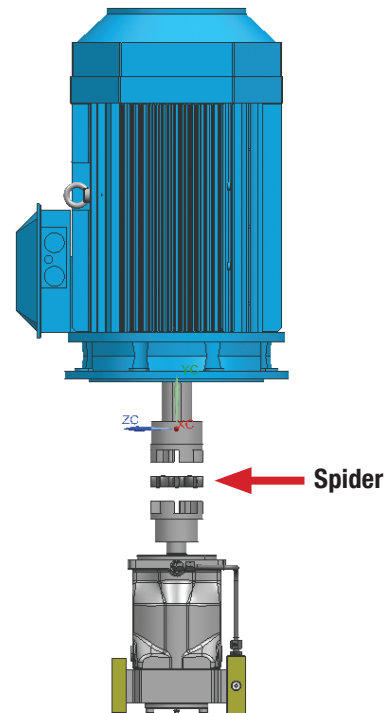
Yours faithfully

  
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Experience has shown that the spider of the couplings connecting the electric motors and hydraulic pumps on the HPS on ME-B engines may wear out prematurely. An example is given in the picture below.



Fig. 1: A worn spider next to a new one

The following systems listed in Table 1 are included in the spider upgrade.

To determine whether your ME-B HPS is affected by this upgrade, the pump size and electric motor size can be found on the name plates of the said components.

The Parker systems use couplings from the manufacturer Raja, and the Bosch-Rexroth systems use couplings from the manufacturer KTR. The spiders are distinguishable by their colour, see Table 1:

Coupling manufacturer	Spider colour for hardness 92 Sh. A	Spider colour for hardness 98 Sh. A
Raja	White	Red
KTR	Yellow	Red

Table 1

If the engine is equipped with one of the above systems and the existing spider is red, no upgrade is necessary. Some systems may be configured with purple spiders, and these do not require upgrading either.

MDT pump unit part no.	Supplier pump unit order code	Pump size [ccm/rev]	Motor size [kW]	Spider type	Spider hardness	Action plan	New spider part no to be installed
<b>LS-control Parker</b>							
5159315-3	PU-40948	40	43	ZK 42	92 Shore A	Chg. to Shore 98	5714292-2
5220829-5	PU-41050	46	51	ZK 42	92 Shore A	Chg. to Shore 98	5714292-2
5363666-5	PU-41151	50	51	ZK 42	92 Shore A	Chg. to Shore 98	5714292-2
5245115-3	PU-41065	63	65	ZK 48	92 Shore A	Chg. to Shore 98	5642113-7
<b>DP-control Rexroth</b>							
-	-	50	51	AB33-22/KD 42-92	92 Shore A	Chg. to Shore 98	5714238-5
5282344-2	R987387039	63	65	AB33-22/KD 48-92	92 Shore A	Chg. to Shore 98	5714282-6

Table 2

If the existing spider is white or yellow, MAN Diesel & Turbo will dispatch a new set of spiders to replace the old spiders at the first convenient opportunity. Please inform us if wear is observed on the claw parts of the couplings in connection with this upgrade. We will then send out a complete coupling if needed.

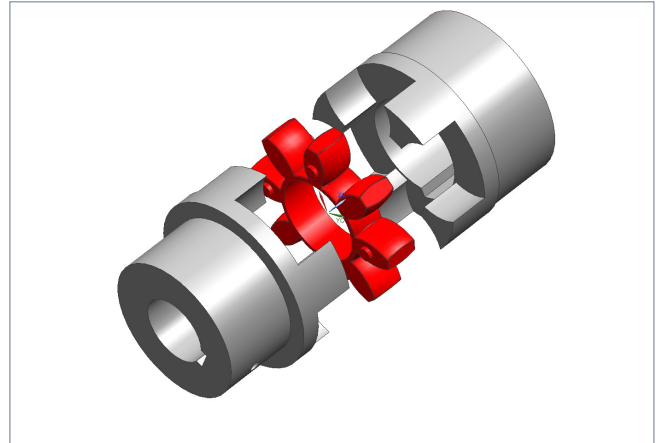


Fig. 2: Pump coupling

Please forward a request to: [Operation.Spareparts@mandieselturbo.com](mailto:Operation.Spareparts@mandieselturbo.com), and include the following data:

- Service Letter SL2016-616/HDP
- IMO No. and engine type
- new spider part no. to be installed: – see Table 2
- delivery address for the parts
- contact person.

Furthermore, MAN Diesel & Turbo recommends the ship crew to check the coupling and coupling spider condition at least once annually.

Questions regarding this Service Letter should be directed to the Small bore design department (LES) at: [les@mandieselturbo.com](mailto:les@mandieselturbo.com)