

**Action code: WHEN CONVENIENT** 

## **Piston Ring Expander Claw**

80-bore engines

SL2014-591/PRP June 2014

## Concerns

Owners and operators of MAN B&W two-stroke marine engines.

Type: G/K/S80ME-C/MC-C/MC

## **Summary**

Risk of undesirable contact between the CPR piston ring and the ring expander tool.

Dear Sirs

A revised CPR (controlled pressure relief) piston ring design results in undesirable contact between the CPR piston ring and the CPR piston ring expander tool. This contact may harm the coating on the piston ring and, in this way, reduce the lifetime of the ring.

The issue can be solved by introducing a minor modification to the piston ring expander tool.

Yours faithfully

Mikael C Jensen

Vice President

Engineering

Niels B Clausen

Senior Manager

Engine and System Application



Head office (& postal address) MAN Diesel & Turbo

Teglholmsgade 41 2450 Copenhagen SV Denmark

Phone: +45 33 85 11 00
Fax: +45 33 85 10 30
info-cph@mandieselturbo.com
www.mandieselturbo.com

PrimeServ

Teglholmsgade 41 2450 Copenhagen SV Denmark

Phone: +45 33 85 11 00 Fax: +45 33 85 10 49 PrimeServ-cph@mandieselturbo.com Production

Teglholmsgade 35 2450 Copenhagen SV Denmark

Phone: +45 33 85 11 00 Fax: +45 33 85 10 17 manufacturing-dk@mandieselturbo.com Forwarding & Receiving

Teglholmsgade 35 2450 Copenhagen SV Denmark

Phone: +45 33 85 11 00 Fax: +45 33 85 10 16 shipping-cph@mandieselturbo.com MAN Diesel & Turbo

Branch of MAN Diesel & Turbo SE, Germany CVR No.: 31611792 Head office: Teglholmsgade 41 2450 Copenhagen SV, Denmark German Reg.No.: HRB 22056 Amtsgericht Augsburg

## **MAN Diesel & Turbo**



The latest version of the CPR piston rings for our large bore engines features a shorter "finger lock". This does not comply with the current length of the claw on the piston ring expander tool, which results in contact between the tool and the piston ring. This can harm the coating on the piston ring, see Fig. 1. Damage to the piston ring coating will lead to reduced lifetime.

The issue described above is limited to 80-cm bore engine types only.

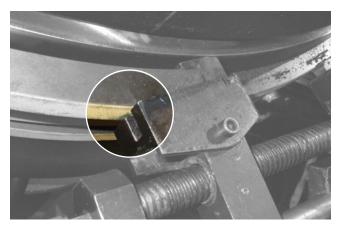


Fig. 1: Undesirable contact between piston ring and expander tool

The issue is not likely to occur before new piston ring spare parts are delivered. We therefore recommend that you rectify the tool when convenient. The following minor modification to the tool solves the problem; shortening the length of the claws to approximately 55 mm allows the piston ring to

fit inside the groove in the claws as originally intended. The length of the claw is typically 60 or 70 mm. An example of the modification is illustrated in Fig. 2.

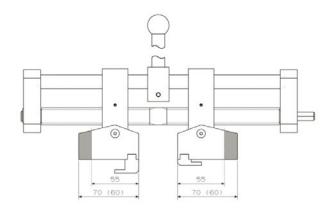


Fig. 2: The crosshatching indicates the area that needs to be cut off to obtain compatibility between the new piston ring finger lock and the expander tool

If modification of the tool is not desirable, MAN Diesel & Turbo can offer a suitable tool in replacement. Please contact: PrimeServ-cph@mandieselturbo.com, for price and availability.

If you have any questions regarding the content of this Service Letter, please contact our Maintenance Tools department - LEE3 via e-mail LEE3@mandieselturbo.com.