## MAN B&W Diesel A/S



## **Service Letter**

No.:

SL88-227/OES January 1988

Dear Sirs,

Wear resistant turbine nozzle ring for the MAN B&W NR20/R, NR24/R, NR26/R and NR20 turbochargers

An improved design of turbine nozzle ring with increased wear resistant material and thicker blades has been introduced to counteract abrasive wear, caused by the increased use of poor quality heavy fuels.

Abrasive wear will shorten the blades in the turbine nozzle ring. Measurements and service experience have proved that up to 50% shortening of the blades is acceptable without influence on the turbocharger efficiency. Consequently, we do not recommend to change the nozzle ring until the length of the blades is reduced to the values on' the enclosed technical information 309S2/612S1.

The life time of the nozzle ring will depend on the content of hard abrasive particles in the exhaustgas as e.g. catalyst fines from the refinery. For the sake of good order, please be informed that the amount of catalyst fines in the fuel should be minimized as far as possible by the purifier equipment on board the ship.

Turbochargers of the types NR20/R, NR24/R, and NR26/R are equipped with the wear resistant turbine nozzle ring as standard.

For the NR15/R turbo charger the wear resistant turbine nozzle ring will be introduced primo 1988.

MAN B&W Diesel A/S Center syd Stamholmen 161. DK-2650 Hvidovre Copenhagen Diesel Service

 Spare
 Parts

 Telex
 31197 bwpart dk

 Reg no
 24231

MAN 8&W Diesel A/S
Holeby Generating Sets
Østervej 2 DK 4960 Holeby, Denmark
Telephone + 45 3 90 60 26
Telecopy + 45 3 90 66 76
Cables oildiesel maribo

Marketing
Telex 40646 hodiel dk
Service

Telex 40280 hodiel dk Reg no 24231 For the NR20 turbocharger the wear resistant turbine nozzle ring is introduced as standard and will be delivered when ordering. Please note that ordering has to be according to the operating manual with reference to the turbocharger's serial No. and item No. 513.001.

We recommend to use the operating manual when removing and refitting the turbine nozzle ring.

Best regards,

MAN B&W DIESEL A/S, HOLEBY

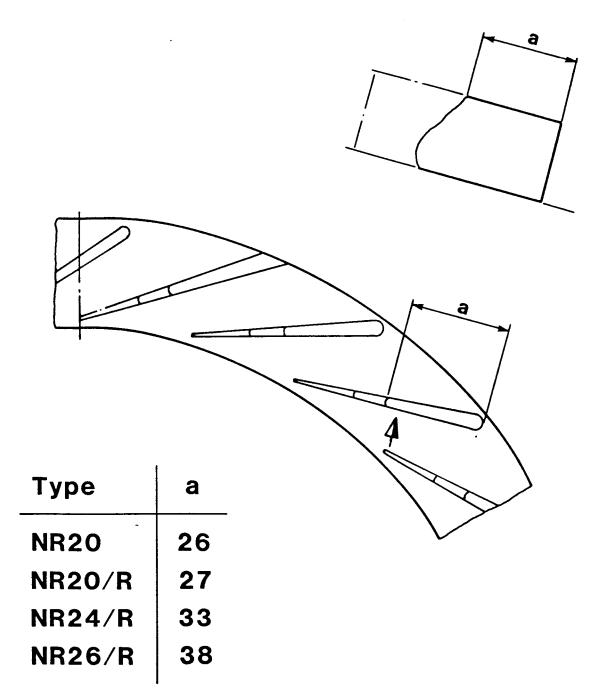


## **TECHNICAL INFORMATION**

309 S2/612 S1

WEAR OF NOZZLE RINGS ON NR-TYPE TURBOCHARGERS

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a = minimum recommended lenght of nozzle blade

