



MAN Diesel & Turbo SE 86224 Augsburg Germany

Address

Our ref.	Phone	Fax	E-Mail	Augsburg
ASB2011/12/09	+49 821 322 4402	-	primeserv-tc-warranty@mandieselturbo.com	09.12.2011

ASB2011/12/09 - Product Warning of TCR Turbochargers

Dear Ladies and Gentlemen,

With our Alert Service Bulletin ASB2009/12/23 we informed you that according to our operational experience the compressor wheel of our TCR turbochargers might burst by foreign object impact in a way that fragments are throw out of the turbocharger with high kinetic energy. We furthermore informed that a upgrade kit is available to reinforce the connection between compressor casing and bearing casing in order to keep the fragments inside the casings.

Based on this ASB and our operational experience MAN Diesel & Turbo has started an extensive research program supported by numerical calculations as well as hardware testing. In the course of this research program the analyses showed that even by using the upgrade kit described in ASB2009/12/23 the containment safety of the turbocharger cannot be fully assured.

For this reason we much to our regret have to issue another ASB which you will find attached to this letter. We explicitly ask you to obey the important operational instructions in this ASB as well as the attached testing and commissioning instructions by all means, to inform your personnel accordingly and to forward the ASB to all your clients using TCR turbochargers.

Vorsitzender des Aufsichtsrates:
Dr.-Ing. Georg Pachta-Reyhofen
Vorstand: Dr.-Ing. René Umlauf (Sprecher),
Dr.-Ing. Hans-O. Jeske, Dr. Peter Park,
Dr.-Ing. Stephan Timmermann
Sitz der Gesellschaft: Augsburg
Registergericht: Amtsgericht Augsburg, HRB 22056
Ust.Id.-Nr.: DE 811 136 900
MAN Diesel & Turbo – a member of the MAN Group

MAN Diesel & Turbo SE
Postadresse: 86224 Augsburg, Germany
Hausadresse: Stadtbachstraße 1, 86153 Augsburg, Germany
Telefon: +49 821 322-0, Telefax: +49 821 322-3382
<http://www.mandieselturbo.com>
Deutsche Bank Augsburg DE93 7207 0001 0015 9244 00 SWIFT: DEUTDEMM720
Commerzbank Augsburg DE91 7204 0046 0121 6456 00 SWIFT: COBADEFF720
Deutsche Bank Oberhausen DE46 3657 0049 0415 8721 00 SWIFT: DEUTDEDE365
Commerzbank Oberhausen DE81 3654 0046 0380 0877 00 SWIFT: COBADEFFXXX



Finally we would like to assure you that MAN Diesel & Turbo is working with maximum priority on the development of a new upgrade and serial solution to ensure a 100% containment safety at all operating conditions. We will inform you and take immediate action as soon as this solution is available.

Furthermore we would like to offer you our maximum support for the communication with your customers. If you need such support, or in case of any questions, please do not hesitate to contact us. We also would like to offer a personal visit to your company at your earliest convenience to explain the details of the ASB and to answer all your questions.

We deeply regret the inconvenience caused and thank you very much for your kind understanding and cooperation in this matter.

Finally we have to ask you to confirm the receipt of this ASB by signature with attached form "Acknowledgement of Receipt".

Best regards

MAN Diesel & Turbo

A handwritten signature in blue ink, appearing to read "i.v. A. Fernandez".

Dr. Antonio Fernandez
Vice President
Head of Sales

A handwritten signature in blue ink, appearing to read "i.v. A. Rippl".

Dr. Alexander Rippl
Vice President
Head of Turbocharger Engineering