

Service Information

Caterpillar Motoren GmbH & Co. KG product support information for medium-speed engines

Engine platform: M25
Engine section: Turbocharger

Engine type: M25 / M25C
Validity: until further notice

No. 0008M25 • Issue 1; October 14, 2020

Information for engine owners and management

Action: for your information

Containment level enhancement parts for KBB turbocharger type R5-3 available

The turbocharger maker KBB informed us about the release of **Service information exhaust gas turbocharger S135 (2019-07-03 Rev.: 00)**. This service information informs operators about availability of containment enhancement parts.

The bearing casing, compressor casing and related assembly parts were improved to meet current containment requirements. The following sets are available:

- **Bearing casing, compressor casing and related assembly parts**
- **Complete cartridge with compressor casing and related assembly parts**
- **Complete R5-3 turbocharger**

In case single parts for R5-3 turbocharger are required and no containment enhancement set is ordered at the same occasion, parts can only be sold and delivered if the receipt of this service letter and its attachment is confirmed by returning the signed page 2 by e-mail to Caterpillar Motoren GmbH & Co.KG

E-mail: ju_tecservice@cat.com

Thank you for your understanding and for your good support.

Please note:

- Please send your confirmation of receipt also together with your turbocharger parts order to your local MaK Service facility.

1 Attachment: KBB Service information exhaust gas turbocharger S135 (2019-07-03 Rev.: 00).



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**Acknowledgement of receipt KBB Service information exhaust gas turbocharger
S135 (2019-07-03 Rev.: 00)**

Send to:

Your local MaK service facility

AND

Caterpillar Motoren

E-mail: ju_tecservice@cat.com**KBB Service information exhaust gas turbocharger S135 (2019-07-03 Rev.: 00)
received and read:**

Company:

Name:

Engine serial No. (s):

Turbocharger serial No.(s):

Date and place:

Signature:

Subject: Bearing casing - compressor casing connection

Valid for TC types: R5-3

Valid for engines: CAT / MaK – M25

1 Explanation

The changes described in this service information refer to the explanations in service information S096.

As a result of the safety-relevant development process:

- the material of the bearing casing (2000) has been changed,
- a fixed flange is used for the bearing casing – compressor casing connection instead of a V-band flange (2517),
- the foot (2201) has been adapted accordingly.

A conversion set can be ordered from KBB or the engine manufacturer, stating the serial number and specification number.

2 Measures



KBB has to be informed of each conversion, stating the serial number!

Converted turbochargers are fitted with a new nameplate bearing an "old" specification number and a "new" serial number!

Always use compressor casings and connecting elements of the "new" design when installing cartridges of the new design!

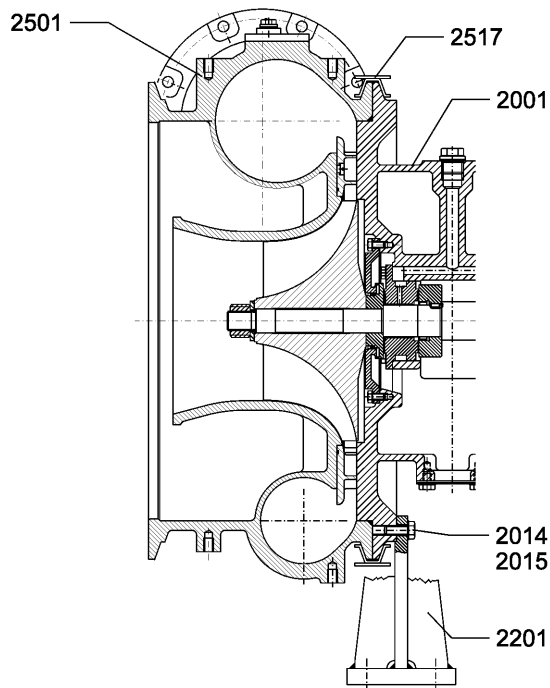
Always perform a complete conversion during repair / service work on turbochargers with an old serial number!

- ☒ Immediately convert cartridges and turbochargers of the "old" design!
- ☒ Render the bearing casings (2001) and compressor casings (2501) of the "old" design unusable. Then clearly document the "unusable" state by taking a photo. Send the photo documentation to service-24/7@kbb-turbo.com by e-mail.
- ☒ Scrap bearing casings (2001), compressor casings (2501) and connecting elements of the "old" design!
- ☒ No longer use the "old" design.

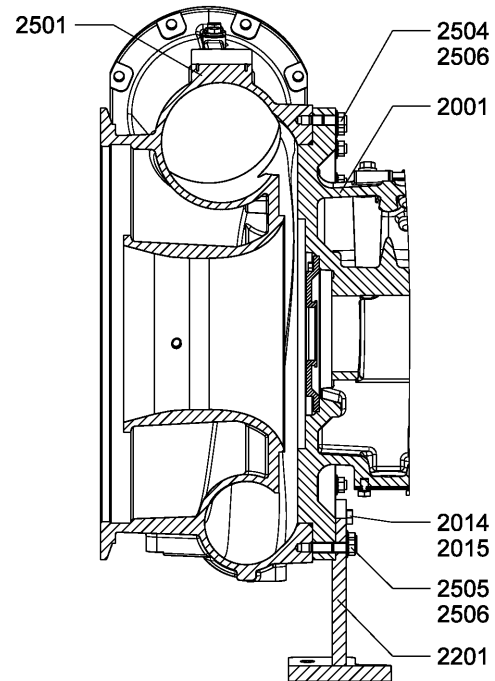
3 Design changes

The following design changes have been carried out:

"old" design



"new" design



2458-TD004

4 Conversion



Converted turbochargers are fitted with a new nameplate bearing an "old" specification number and a "new" serial number!

A conversion set containing the following parts is offered for the conversion:

- Bearing casing (2001) or cartridge
- Compressor casing (2501) with new nameplate
- Foot (compressor) (2201)
- 17 x stud bolt (short) (2504)
- 7 x stud bolt (long) (2505)
- 24 x hexagon nut (2506)
- 4 x hexagon head screw (2015)
- 4 locking washer (2014)
- Gaskets (9802)
- Locking elements (9803)
- 2 x hexagon socket screws (5003) with 2 x stop bushings (5004) to fasten the compressor diffusor

5 Identification

Casing:

The casings can be identified by the blank number:

	"old" blank number	"new" blank number
Bearing casing:	2.458-20010.51:01R	2.458-20010.61:01R
Compressor casing:	2.458-25010.52:01R	2.458-25010.62:01R

Converted turbochargers:

Converted turbochargers are fitted with a new nameplate bearing an "old" specification number and a "new" serial number. The serial number is advanced by "2000".

	"old" serial number	"new" serial number
Example serial number:	0138	2138

New turbocharger:

The serial number of new turbochargers which have been delivered in the "new" design is greater than 2283.

6 Change of spare parts

Only bearing casings (2001), compressor casings (2501), cartridges, feet (2201) and connecting elements of the "new" design will be delivered as spare parts in the future.

Scrap all bearing casings (2001), compressor casings (2501) and connecting elements of the "old" design!

7 Introduction

The changes will be introduced in turbochargers as of the following series number:

Turbocharger: as of 2284