

IMPROVED SERVICE-LIFE OF THE CLUTCH FOR ALL CLUTCH COMPRESSORS

Additionally, a change in the service concept is necessary

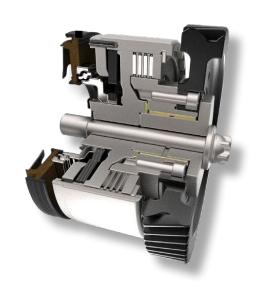
For the maintenance of the Knorr-Bremse clutch compressors, a new clutch has been developed and introduced. It convinces with its enhanced robustness and its extended service life. Customers will profit from a longer lifetime and less exchanges, leading to a long-term reduction in costs.

Compared to the previous version, the new high torque clutch (HTC) has a higher amount of friction faces and more strings. The new clutch reaches up to 3.5 million actuations.

Because of the introduction of the new and more durable clutch, the service concept of the compressor required adjustments. Customers replacing the old clutch with the new HTC will need to exchange additional components. The following pages provide more information regarding these changes.

At a glance

- > Enhanced robustness
- > Extended service time
- > Higher torque
- > Up to 3.5 million actuations





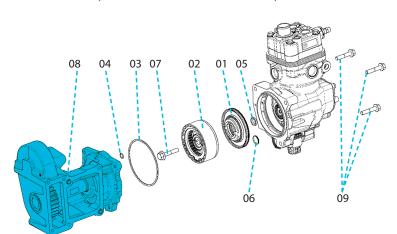


CHANGES – NEW CLUTCH KIT

The changes refer to the switch from a standard clutch to a HTC clutch. When replacing a HTC clutch with another HTC clutch, no additional parts are needed.

MAN

Due to a difference in shafts, replacing the standard clutch with a HTC requires an additional installation of an intermediate box. The change of the intermediate box just needs to be done for the first exchange from standard clutch to HTC clutch. After the switch, the HTC can be exchanged without having to change the intermediate box. Nevertheless, new clutch kits will also include the intermediate box to offer the customer all needed components for the exchange. The following table and illustration provide an overview of the components for MAN HTCs being included in the new kit:



| Pos. | Description | Qty. |
|------|------------------|------|
| 01 | Piston | 1 |
| 02 | Clutch pack | 1 |
| 03 | 0-ring Ø126 x Ø3 | 1 |
| 04 | 0-ring Ø12 x Ø2 | 1 |
| 05 | Hirth Gasket | 1 |
| 06 | Pin | 1 |
| 07 | Screw M10x53 | 1 |
| 08 | Intermediate Box | 1 |
| 09 | Screw M10x50 | 3 |

VOLVO, RENAULT, SCANIA

The installation of HTCs in Volvo, Renault and Scania applications requires additional action in terms of exchanging the gear when switching from standard clutches. Replacing the gear is only requested to do one time. After that, the respective HTCs can be replaced without any further action. The necessary gear is included in the new clutch kit.

IVECO

Regarding the switch from standard clutches to HTCs for Iveco applications, no additional actions or parts are required. The already installed gear can be used without further modification.

CHANGES – THE NEW PRODUCTS AVAILABLE

| IAM part number standard clutch kit | IAM part number HTC clutch | ОЕМ |
|--|-------------------------------------|----------------------------|
| | K222937K50 (incl. Intermediate box) | MAN |
| K097453K50 | K224827K50 (incl. gear) | Scania DU |
| | K221892K50 (incl. gear) | Scania DL |
| K063324K50 | K190990K50 (incl. gear) | Volvo/Renault MD 11 |
| NU03324N3U | K190992K50 (incl. gear) | Volvo/Renault MD 13/ MD 16 |
| K153298K50 | K225011K50 Launch in Q4/2022 | IVECO |

NEW TOOL KIT

To properly install the new HTC, an additional tool is needed to remove the HTC clutch from the compressor. Therefore, a new tool will be included into the existing tool case and will be additionally available as add-on for already purchased tool cases.





RELATED DOCUMENTS

| Document | Description | |
|--------------------|---|--|
| Up2Date Y322238 | Knorr-Bremse Clutch Compressor for Scania Applications | UPZOATE WEST STATES OF THE ST |
| Up2Date Y283008 | Knorr-Bremse Clutch Compressor for Man Applications | The Second Secon |
| Up2Date Y390951 | Knorr-Bremse Clutch Compressor for Iveco Applications | WEARING CONTINUES MAGINISTICS WASHINGTON WASHIN WASHINGTON WASHINGTON WASHINGTON WASHINGTON WASHINGTON WA |
| Up2Date Y312608 | Knorr-Bremse Clutch Compressor for Volvo/ Renault Applications | Note and Conference. |

KEEP IT RUNNING

Up-to-date information on our products can be found on our website truckservices.knorr-bremse.com



TRUCKSERVICES

Knorr-Bremse Systems for Commercial Vehicles Moosacher Strasse 80 | 80809 Munich | Germany Tel: +49 89 3547-0 Fax: +49 89 3547-2767 truckservices.knorr-bremse.com

Note

All information is subject to change. A printed version of this document may therefore not correspond to the latest revision. To obtain the latest version, please visit our website truckservices.knorr-bremse.com or contact a Knorr-Bremse representative in your area.

If service work is carried out on a vehicle based on information provided herein, it is the responsibility of the workshop to ensure the vehicle is fully tested and in full functional order before the vehicle is returned into service. Knorr-Bremse accepts no liability for problems caused as a result of appropriate tests not being carried out.

Copyright © Knorr-Bremse AG

All rights reserved, including industrial property rights applications. Knorr-Bremse AG retains any power of disposal, such as for copying and transferring.

Disclaime

The information contained herein is intended for the exclusive use of trained persons within the commercial vehicle industry, and must not be passed on to any third party. All recommendations regarding products and their servicing or usage are with reference to Knorr-Bremse products and should not be considered applicable to products from other manufacturers. This information does not purport to be all-inclusive and no responsibility is assumed as a result of its use. We cannot accept any liability nor offer any guarantee regarding data accuracy, completeness or timeliness. The information does not represent any guarantee or ensured characteristics of the Products or Systems described. No liability can be accepted based on the information, its use, recommendations or advice provided. In no event may we be held liable for any damage or loss except in the case of wilful intent or gross negligence on our part, or if any mandatory legal provisions apply. This disclaimer is an English translation of a German text, which should be referred to for all legal purposes. Any legal disputes arising from the use of this information shall be subject to German law.