

MaK Parts & Service

Wingless Exhaust Valves

Genuine MaK Parts for M43 (C) & M46DF

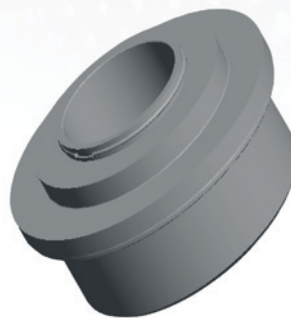


Introduction

Continuous Product Development

Faced with the prospects of tighter emissions, lower sulphur limits and alternative fuels, Caterpillar has developed new M43/M46DF exhaust valves. This new design of alternative exhaust valves with positive rotation, has been introduced whereby the rotational movement of the exhaust valves is achieved by valve rotators.

The rotator is installed below the valve spring and, contrary to the previous winged valve spindles, creates constant rotation independent of the exhaust gas flow, thus improving valve wear while reducing thermal load.



Valve rotator

Better Engineering, Materials, and Manufacturing. Better Product.

Genuine valves are the only valves engineered and manufactured to the specific standards and tolerances required to work optimally with medium-speed engines (MSE) of the Cat® and MaK™ brands.

Caterpillar Motoren manufactures its own exhaust valves to the highest quality standards, giving you the assurance of long component life. Our engineering, quality materials, and process controls create wear-resistant valves guaranteed to offer long service life with minimal risk of failure.

Genuine exhaust valves are faced with one of the most sophisticated heat and corrosion resistant material available today. Powder welding to the valve, using a proprietary process designed to ensure complete fusion and bonding to the parent material.

For more than 25 years, genuine exhaust valves have been manufactured at the Caterpillar Motoren in Kiel, Germany, by highly qualified personnel utilizing the same quality manufacturing processes used for our engines.



Converting to wingless valves

In the long run, converting to exhaust valves with a rotator is beneficial for the engine's operation, designed to reduce your operation costs under all future operating conditions.

Engine overhauls are a good opportunity for shifting to the new exhaust valve style. We recommend having all cylinder units of one engine exchanged. However, an operation with a mix of winged and wingless exhaust valves on one engine is permissible. But both exhaust valves on one cylinder head have to be of the same style.

Conversion kits for cylinder heads are available. They include the following parts:

- Valve spindles, exhaust
- Valve rotators
- Spring plates

Please contact your local dealer for more information about equipping your engine with the new exhaust valves.

Your Benefits

■ More Profit

Greater reliability and longevity maximizes your uptime and reduces. Total Cost of Operation.

■ Lower Operating Cost

With longer life and longer Time Between Overhauls, MSE engines cost less to operate with genuine parts.

■ Greater Safety

MSE engines operated with genuine parts perform longer with fewer unplanned maintenance events or risk of failure.

■ Availability

All parts can be dispatched within 24 hours through our strategically located distribution centre and delivered globally by our authorized distributors.



*"No one else has the ability, availability or protection of the OEM in the aftermarket." **

* MaK customer



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For more information please visit our website:
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https://www.cat.com/en_US/by-industry/marine/mak-dealer-locator.html

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