

Date: September 04, 2018  
Subject: Big end bearing  
Engine type: M20C

Caterpillar confidential: green

## New Big end bearing variant for M20C Engines available

With our Service Information 0003M20 we informed our customers about high wear rates at big end bearing journals in case high lubrication oil contamination levels are present for a certain time. In this context we would like to inform you about series introduction of three-compound lead bronze big end bearings for MDO and HFO operated M20C engines. Due to a new bearing technology this new big end bearing type is more robust in dealing with weak lubrication oil maintenance. This new bearing type has the following features:

1. Increased dirt resistance
2. High wear resistance
3. Prevention of cam wear
4. Better detection of bearing wear status
5. Optimal lubricating oil flow rate for piston cooling
6. Optimal spreading of the load bearing capacity in the main load area
7. Increase of fatigue strength
8. Generally higher reliability

We recommend replacing all old big end bearing variants by the new big end bearing (variant -31) at HFO operated M20C engines at the next scheduled maintenance or latest at next 15,000 hours maintenance interval.

- For **premature** big end bearing exchanges at the **15,000 hrs or 45,000 hrs** maintenance interval we grant a price reduction of 50% of the parts list price.
- For **premature** big end bearing exchanges at engines with operating hours less than **25,000 hrs or 55,000 hrs** we will also provide a price reduction of 50% of the parts list price.
- The price reduction is **not valid for regular 30,000 hrs or 60,000 hrs** maintenance overhauls

Especially for HFO M20C engines with old bearing variant -21 we strongly advise having the big end bearing exchanged at next opportunity and following the recommendations stated in Service Information 0003M20.

The degree of lube oil contamination at MDO operated engines is much lower. Therefore, MDO operated M20C engines do not require a premature big end bearing replacement.

Please contact your local MaK Service Representative for an offer.

