



# Genuine Cummins Bearings

## #BadhoBefikar



Plain journal bearing is meant to handle high load and metal-to-metal contact. Journal bearing helps in lubrication of running parts without interruption.



### Features

- Precise design for 20 ~ 100 microns running clearance

- Best-in-class Embeddability to accommodate foreign particles in the lubricant
- High Conformability to absorb shaft deflections

- Accurate crush height design to ensure precise radial pressure (100-150 bar) and hoop stress (>2000 bar)

- Maintains Bearing Oil film thickness of 1 micron for Main bearing and 0.5 microns for con rod bearing



### Advantages

- Clearance ensures longer fatigue resistance under varying load conditions
- Reduced friction

- Capability to withstand extreme load for long durations
- Load carrying capacity to sustain **200 bar** peak cylinder pressure
- Avoids journal wear

- Ensures proper interference of bearing in housing
- Uniform heat transfer at surface contacts

- Helps to bear load & reduce friction
- Avoids bearing failure due to excess heating



### Benefits

- Improves fuel economy
- Ensures near **infinite life** of crankshaft

- Prevents bearing seizure leading to reduced unplanned engine downtime
- Reduces frequency of major engine overhaul

- Avoids slippage of bearing resulting in reduced wear and tear of bearing

- Improved life of bearing up to 7 lakhs km



# Risks of Non-genuine Parts

› Wear and tear due to inadequate gap between bearing and housing



› Dynamic loading of plain bearings causes surface fatigue



- Insufficient clearance between bearing and shaft leads to break oil film and more wear of crankshaft
- Incorrect bearing crush height may result in improper contact pressure between bearing and housing resulting in **bearing seizure**
- Incorrect bearing compatibility with pairing parts like crankshaft, connecting rod resulting in **major parts failure**



# Why use Genuine Cummins Parts

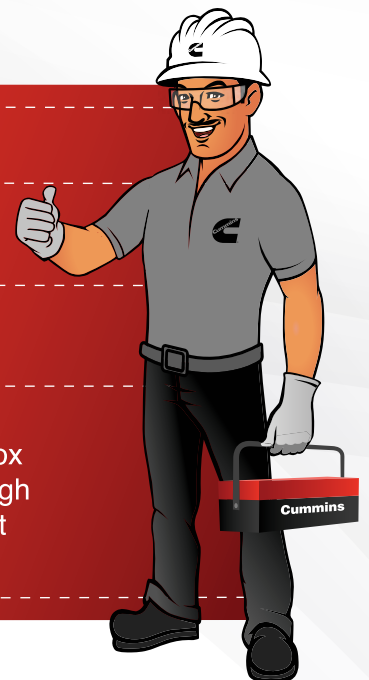


Demonstrated life of more than 7 lakhs km

Compatible with parts like crankshaft, connecting rod for Cummins engines

3500+ hours of cumulative testing done to ensure premium quality of Genuine Cummins parts

Bearing undergoes various tests on vehicle as proof of its reliability like Endurance Test, Thermal Abusive Test, Shot Box (Steady state with worst case temp loading) Test including high temperature, high load conditions, cold starting of engine test at 173K (-20 °C)



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