Firefighting

A self-help guide to do's and don'ts



Avoid further damages when dismantling machinery and removing bearings



What can go wrong:

When removing bearing - adjacent or contacting surfaces i.e. shaft, housing, abutment shoulders, seal surfaces can be damaged



Using incorrect equipment and unnecessary force when removing the bearing can cause damage.







What to do different:

Assess the size and type of the bearing that needs to be removed.

(For SKF bearings get instructions on mount.skf.com)



Use a suitable bearing puller

- Mechanical
- Hydraulic



Identify seal issues

- 50% of bearing failures are related to sealing issues!



If you are having seal failures,

Check for evidence of contamination around the seal or evidence of leakage

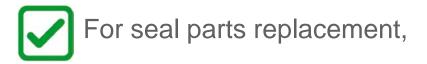


Inspect the seal wear. If any parts missing – can be a contamination issue.

In case of rubber seal – check the condition, e.g is it baked hard? did it lose its form?







Inspect corresponding shaft contact area and use supplementary repair items, i.e <u>Speedi-</u> <u>Sleeve</u>



In case you don't have a replacement at hand,

- talk to your authorized distributor
- check alternatives online: <u>Seal Select</u>



- For special seals, consider the option of <u>customized machined sealing</u> component – ready in 1 or 2 days!
- See also <u>standardized profiles by common</u> <u>application.</u>



Identify specification of bearing



What to do:

- Take reference from the ring, from a parts list, from a drawing
- Be sure about the exact specification





- Consult your authorized distributor
 - note application conditions
 - beware of prefixes and suffixes, they can mean very different configurations

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- Check available online tools for bearing identification and cross referencing
- Have bearing references visible for next maintenance

Bearing mount



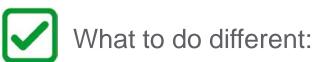
What can go wrong:

Mounting on a shaft with poor condition



16% of bearing failures are due to poor fitting!

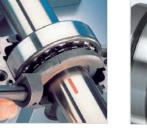




Identify correct mounting procedure by type and size of bearing. (For SKF bearings get instructions on mount.skf.com)

Identify best practice techniques and tools









Mechanical tools

Hydraulic tools

Heaters

SK

Watch <u>demonstration video</u> for use of best mounting practices by bearing type



Bearing Iubrication



What can go wrong:

36% of bearing failures are due to poor lubrication!

Incorrect grease used

Incorrect volume of grease in bearing and/or housing

Lubricant can get contaminated







What to do different:

Use the <u>right lubricant</u>, correct fill of both bearing and housing; keep it clean. <u>Manual lubrication tools</u>



Can an <u>automatic</u> <u>lubricator</u> be fitted?





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If changed application conditions, consult <u>skf.com/LubeSelect</u>

Power transmission - belts



What can go wrong:

Belts can slip; pulleys can wear



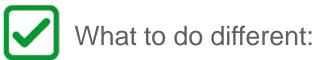






Do not install belts by levering them on!





- Check pulley grooves and <u>replace</u> if worn
- Tension (and re-tension) belts to correct values, change to new <u>belts</u> by case
- Ensure pulleys are <u>aligned</u>



Power transmission – chain drives



What can go wrong:

Chain drives

• Chain rides up on sprockets / jumps the teeth





Couplings

- Excessive vibration
- Catastrophic failure





Chain Drives

- Check amount of chain elongation (< 2%), replace chain by case
- Check and set chain tension
- Check <u>sprocket</u> tooth wear and replace if worn
- Ensure chain is properly lubricated

Couplings

- Ensure <u>alignment of shafts</u> within coupling tolerances
- Check elastomeric element for tears or deterioration
- Lubricate Gear & Grid couplings



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