

SINGLE POINT LESSON- HANDLING OF BEARINGS

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Handling of Bearing

“Single Point Lesson”

Reference: SKF Bearing Installation and Maintenance Guide



General Rules which must be followed:

“If any of these rules are not followed they will result in reduced life of a bearing resulting in self induced failures”

1. Always leave bearings wrapped in paper and sealed in their boxes until ready to use.
2. Always use clean, lint free gloves to handle bearings
3. Store bearings in their original sealed packages in a clean, dry area that is free of vibration
4. Never use a bearing to check fit of a shaft or housing
5. If the bearing is to be used in high or low temperature application or if the grease is not compatible with the bearing preservative then cleaning is required
6. Always dry a bearing after cleaning.
7. Never allow a bearing to spin while drying it with clean, dry compressed air.
8. Bearings must also be cleaned if they have been contaminated or you are changing to a different type of grease.
 9. Large bearings with thick preservative should be cleaned – outside diameter of 440 Millimeters or more
 10. Use clean solvent when cleaning a bearing.
 11. Never rotate a bearing that is dry
 12. Bearings that have been previously greased and are sealed or shielded should not be cleaned

Failure Modes *Initiated* during installation

1. **Wear – Cause:** Contamination

- Lack of cleanliness before and during mounting operation.

Solution: Use bearing mounting gloves, keep area clean

2. **Indentations – Cause:** Faulty Mounting

- Mounting Pressure applied to wrong ring

Solution: Apply the mounting pressure to the ring with the interference fit

- Excessively hard drive-up on tapered seating.

Solution: Follow carefully the instructions concerning mounting bearings on tapered seating

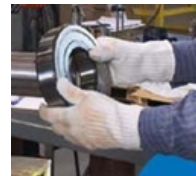
3. **Indentations – Cause:** Contamination

- Lack of cleanliness before and during mounting operation.

Solution: Use SKF bearing mounting gloves, keep area clean

Mounting Bearings

- If possible mount the bearings in a clean, dust free environment (even small contamination will cause premature failure)
- Keep the bearing in a clean environment until sealed, cover with clean clothes
- Use gloves. These are highly recommended and should only be used for installing bearing otherwise they would be kept in their sealed plastic bag.



- Use the proper Handling and Installation Tool – if possible (these will help you reduce the chance of inducing a failure to a bearing during installation.



- When moving or lifting large bearings use lifting tackle they should not be suspended at a single point but use a steel band or fabric belt to wrap around the bearing. A spring between the hook and lifting shackle or sling. You can now install the bearing in a vertical position without damaging the bearing.
- When lifting a large bearing for installation in a horizontal manner threaded rods can be installed by SKF to facilitate installation of lifting eyes and should be lifted at three points.



- Insure the shaft clearances are within acceptable tolerances before installation a bearing. You can find this information online..

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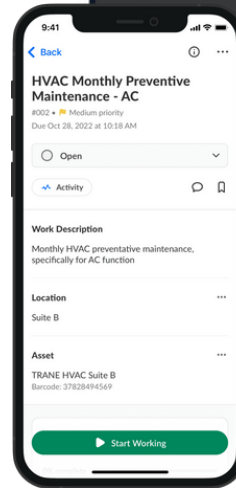
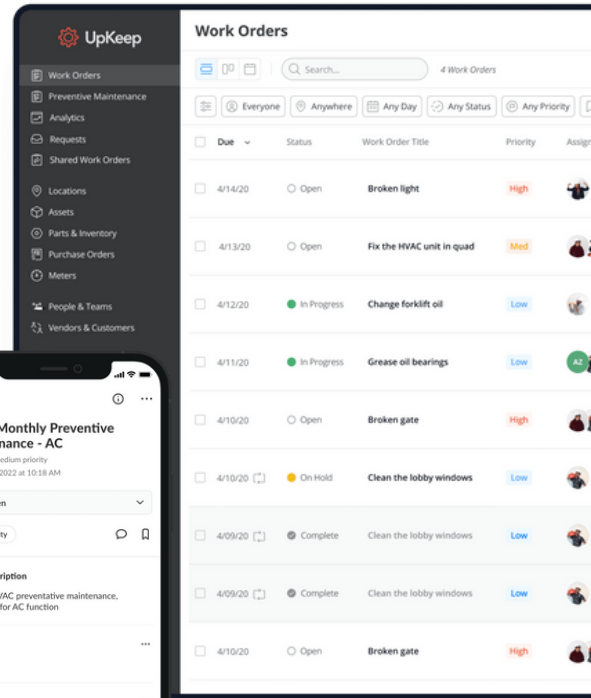
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