Dismounting

1. Clean the bearing position and all the internal hexagons of the grub screws.

2. Remove any rust or damage over which the bearing unit is to be withdrawn.

3. Loosen the attachment bolts.

4. Remove the attachment bolts.

5. Support the shaft with its components.

6. Loosen the grub screws in the mounting side ring 3 or 4 turns.

7. Face the mounting ring side and pull the unit holding the housing base until it releases from shaft.

8. If needed use a rubber hammer and hit the backside of housing until it releases from shaft.

9. Withdraw the unit from the shaft.

10. If the application permits, it is recommended to remove all the attachment bolts and to lift out the complete arrangement of shaft with SKF ConCentra units and other components. Then proceed as described under point 6 to 9.

Lubrication

SKF ConCentra roller bearing units are delivered filled with SKF grease. The quantity of grease corresponds to a completely filled bearing and 30 - 50 % of the free space in the housing. If relubrication is needed use LGEP 2 grease or equivalent.

Label

The designation of the unit is shown on a label covered by a transparent protective film. If the unit is repainted, the label can be revealed by removing this protective film.











Mounting instruction for SKF ConCentra roller bearing units, SYNT



K-number: 683 version 1
SKF Mekan AB 2008

Mounting SKF ConCentra roller bearing units, SYNT

Before starting installation work, the following instructions should be carefully read:

⚠ The mounting and dismounting of rolling bearings involve the handling of sometimes heavy weights, the use of tools and other devices, and in some cases the use of high pressure oil. In order to avoid accidents, injuries or damage to property please follow carefully the prescribed methods.

CAUTION! This is a unit assembly. No attempt should be made to disassemble the unit prior to installation. The mounting screws must under no condition be tightened unless the unit is mounted on a shaft since this may damage the unit.

Mounting

1. Determine the positions of the locating and non-locating units. The locating unit should always be at the drive side.

2. Make sure that the base of the bearing unit and the support surface are clean and free from burrs. For the support surface a flatness tolerance within tolerance grade IT7 is recommended. Recommended max surface finish for the support surface is $R_a \leq 12{,}5$ µm.

3. Make sure the shaft is clean and free from burrs and check the dimensional and form accuracy of the shaft. The recommended diameter tolerance for the shaft is h9 and the cylindricity tolerance grade IT5. Recommended max surface finish for the shaft is $R_a \leq 3{,}2$ µm. Lightly oil the shaft bearing seats with low viscous oil. A small entrance chamfer on the shaft will make mounting easier.

4. Mount any components which are to be on the shaft between the bearing positions.

5. Push the bearing units on to the shaft.

6. Fasten the bearing units to the support surface with the attachment bolts but do not tighten.

7. Adjust the position of the bearing units on the support surface if necessary.

8. Position the shaft axially in the bearing units.

9. Lock the locating bearing SYNT .. F/FTS/FTF on the shaft.

9a. Tighten the set screws in the mounting ring using a 3 mm bit and a torque wrench. Tighten the screws following the mounting pattern below, to finger tightness.







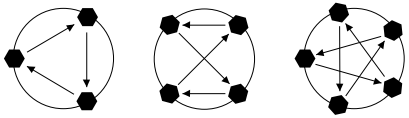




9b. Tighten each set screw to 7,4 Nm following the mounting pattern.

9c. If the supplied hexagonal key is used tighten each screw to finger tightness following the mounting pattern below. Then mount the supplied red torque indicator on the short end of the hexagonal key and tighten the screw until the hexagonal key comes in contact with the torque indicator.

CAUTION! Do not use auxiliary equipment such as hammer or a pipe when tightening the screws.



10. Check the bearing alignment.The maximum permissible misalignment of the shaft relative to the unit is 1,5°. Fully tighten the attachment bolts of the locating bearing unit. The recommended tightening torques for bolts of strength class 8.8 are:

M12 ----- 80 Nm (59 ft.lbf.)

M16 ----- 200 Nm (148 ft.lbf.)

M20 ----- 385 Nm (284 ft.lbf.)

M24 ----- 665 Nm (484 ft.lbf.)

11. Find the middle of the bearing seat in the non-locating housing (SYNT .. L/LTS/LTF) by supporting the shaft and by pushing the unloaded bearing from one end position in the housing to the other while housing is fixed. If only thermal elongation of the shaft is expected it is recommended that the end position of bearing is towards the locating bearing. Be careful to only push the bearing not the housing.

12. Lock the non-locating bearing on the shaft as under point 9-10.

13. If end cover is needed, snap the ECY end cover into the end cover groove.



