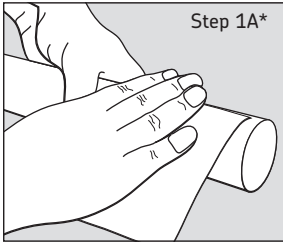
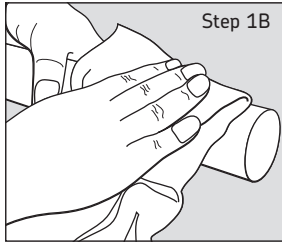


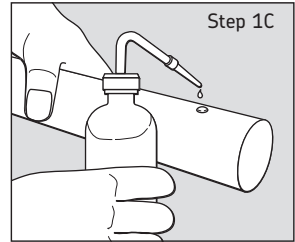
Assembly instructions for SKF tapered roller bearing units, pillow blocks, flanged, and take up housings



Step 1A*



Step 1B



Step 1C

Step 1A Remove any burrs on the shaft with an emery cloth or a fine file.

Step 1B Wipe shaft with clean cloth and check the shaft diameter.

Step 1C Lubricate the shaft with a light oil.

Table 1 – Recommended shaft tolerances

Shaft Diameter	Tolerance
Up to 1 1/2" (35mm)	+0.0000 to -0.0005" (+0 to -.013mm)
1 5/8" to 4" (40 to 100mm)	+0.0000 to -0.0010" (+0 to -.025mm)
4 7/16" to 5" (110 to 125mm)	+0.0000 to -0.0015" (+0 to -.038mm)

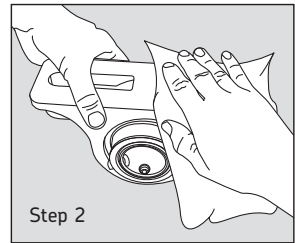
Step 2. Clean the base of the roller bearing unit and the support surface on which it rests. Be sure the supporting surface is flat. If the roller bearing unit elevation needs to be adjusted by shims, the shims MUST extend the full length and width of the support surface. With flanged units, clean the flange mating surface and the support surface.

Step 3. Slide the bearing and housing onto the shaft and position them where the roller bearing unit is to be secured. It will be necessary to remove the bearing load while moving the bearing. Bolt the roller bearing unit securely to the support. With flanged units, be sure the support surface is flat. Bolt the flanged housing securely to the support.

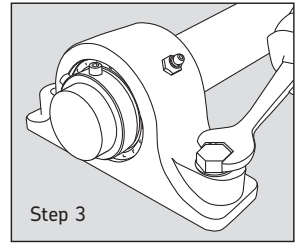
Step 4. Tighten each set screw alternately with proper hex head socket wrench until they stop turning and the hex head socket wrench starts to spring. The spring of the hex head socket wrench can be easily seen and felt if an extension is used. When both set screws are tightened on the shaft, the bearing is firmly seated.**

When the inboard locking collar is inaccessible and cannot be tightened like in the case of a F6BRPE piloted flange with a blind hole installation, the unused inboard locking collar should be removed from the bearing inner ring before installation. This avoids an unused component coming loose during operation.

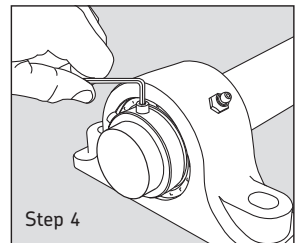
**** CAUTION** Proper tightness of set screws is necessary to assure adequate bearing service life and axial locating ability. To achieve the full permissible axial load carrying rating without an abutment shoulder, the set screw tightening torques listed in **Table 2** on the following page should be applied.



Step 2



Step 3



Step 4

* Illustrations for instructional purposes; be sure proper PPE is used.

Table 2 – Tightening torque for set screws

Shaft size		Set screw size	Torque		Axial holding power ¹	
in	mm	(2) per collar	in-lb	Nm	lb	N
1 ³ / ₁₆ to 1 ¹¹ / ₁₆	35-40	⁵ / ₁₆ " – 18 UNC	155	18	2,625	11,600
1 ³ / ₄ to 2 ¹ / ₂	45-65	³ / ₈ " – 16 UNC	275	31	3,500	15,500
2 ¹¹ / ₁₆ to 3 ¹ / ₂	70-90	¹ / ₂ " – 13 UNC	615	69	5,250	23,350
3 ¹⁵ / ₁₆ to 5	100-125	⁵ / ₈ " – 11 UNC	1315	148	7,000	31,100

¹ Axial holding power is based on use of two properly tightened collars and set screws, with 62° angle between screws on each collar. When a single collar is used (F4BRPE) or when the inboard collar is inaccessible (F6BRPE) due to a blind hole installation, half of the value listed should be used.

To remove the bearing unit

First, loosen the set screws and unbolt the housing from its support. The complete roller bearing unit can then be removed from the shaft. It will be necessary to relieve the bearing load while removing the unit.

Lubrication instructions

The standard SKF roller bearing units are prelubricated with SKF grease LGEP 2, which is a lithium based NLGI #2 grease with EP additives and a base oil viscosity of 200 cSt (mm²/s) at 40°C.

The roller bearing units are equipped with a grease fitting which allows the roller bearing

to be relubricated in service.

The recommended grease relubrication amount can be found in **Table 3**. The recommended relubrication interval depends on the bearing size, loading, shaft orientation, rotational speed, operating temperature, and level of contamination exposure. Contact SKF Application Engineering for the recommended relubrication interval, or it can be calculated using the SKF DialSet program: maprotools.com/dialset.

When relubricating the roller bearing unit, LGEP 2 grease or equivalent compatible grease should be used.

CAUTION: CARE MUST BE TAKEN TO USE GREASES THAT ARE COMPATIBLE.

SKF suggests relubricating the roller bearing unit while it is rotating to help distribute the new grease inside the unit. Use caution and follow safety practices when performing maintenance tasks around rotating equipment.

When relubricating the roller bearing unit, avoid using excessive pressure from the grease gun or pump to avoid displacement or damage of the bearing seals.

The LGEP 2 grease has an operating temperature range of -4 to 230°F (-20 to 110°C). If the bearing operating temperature exceeds these temperature limits, consult SKF Application Engineering for a lubrication recommendation.

For availability of SKF greases, contact your local SKF representative or Authorized SKF Distributor.

Table 3 – Recommended grease relubrication amount:

Shaft diameter range	Grease amount (oz.)
1 ³ / ₁₆ to 1 ¹ / ₄ "	0.1
1 ³ / ₈ to 1 ¹¹ / ₁₆ "	0.2
1 ³ / ₄ to 2 ¹ / ₂ "	0.3
2 ¹¹ / ₁₆ to 3"	0.4
3 ³ / ₁₆ to 3 ¹ / ₂ "	0.6
3 ¹⁵ / ₁₆ to 4 ¹ / ₂ "	1.0
4 ¹⁵ / ₁₆ to 5"	1.5