

BEARLOK PRECISION RETAINING DEVICES

INSTALLATION INSTRUCTIONS FOR 8 SCREW BEARLOKS

Ideal Tools:

- Hex wrench
- Torque screwdriver or torque wrench with hex driver
- BLAS Assembly Socket or Whittet-Higgins PAS Spanner Wrench for preloading bearing

Assembly instructions:

- 1) Check the BEARLOK adjustable retaining device. Make sure the BEARLOK ring is squarely seated on the BEARLOK nut. If not, loosen the cap screws, seat the ring with light finger pressure, and retighten the cap screws into the ring with hand torque until slight resistance occurs. If anaerobic locking compound is desired, it may be applied at this time or after section 4 below.
- 2) Assemble the BEARLOK onto the shaft threads so the BEARLOK threads are fully engaged for its full length. **FAILURE TO DO THIS WILL DISTORT THE BEARLOK DURING TIGHTENING AND PREVENT PROPER ASSEMBLY.** Do not bring the BEARLOK against the bearing components as it must be able to rotate on the shaft threads.
- 3) Establish a slight rotational drag to centralize the BEARLOK retaining device relative to the shaft thread by lightly tightening cap screws 1 thru 4 with a hex wrench in an alternating sequence (see figure 1). Initially the #3 and #4 screws may become loose because of the pressure load placed on the #1 and #2 screws. Rotate the BEARLOK back and forth on the external thread through about 45 degrees to check for a slight drag. If no drag is felt, repeat this process (beginning again with the #1 screw) until the BEARLOK rotates with a drag. Note that this process will have to be repeated more than once depending on shaft pitch diameter and thread size. After rotational drag is felt, lightly tighten the remaining four screws (#5-#8), but not so tight as to change the rotational drag.
- 4) Now the centralized and best balanced BEARLOK adjustable retaining device can be adjusted and/or preloaded against the adjoining retained components. This is done with a Whittet-Higgins BEARLOK Assembly Socket or your design of tool. For accurate and effective assembly, assure that the tool engages the slots in the BEARLOK body section and not just the ring slots.
- 5) After the assembled components are correctly adjusted in position, secure the BEARLOK by tightening the 8 cap screws using a torque screwdriver or torque wrench. Tighten the screws 1/6 turn (one flat of the wrench) at a time in alternating sequence beginning with screw #1. You will not reach the maximum torque the first time. Repeat the tightening sequence (1/6 turn) until the torque on #1 screw is up to or slightly less than the maximum cap screw torque (from table 1). Finish torquing screws #2-#8 and repeat the tightening sequence twice more. At this point, a proper and effective assembly is now completed.

Note: Throughout the tightening sequence, do not overtighten any one screw for it may distort the balance.

FIGURE 1

(Tighten in sequence shown)

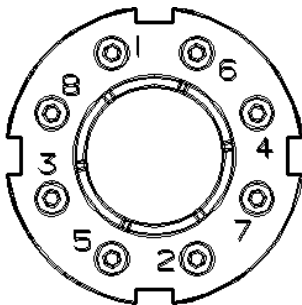


TABLE 1

| BEARLOK SIZE | CAP SCREW | TORQUE In-lb. |
|-----------------|--------------|------------------|
| BL15-BL30 | M6 | 70 |
| BL32-BL40 | M8 | 100 |