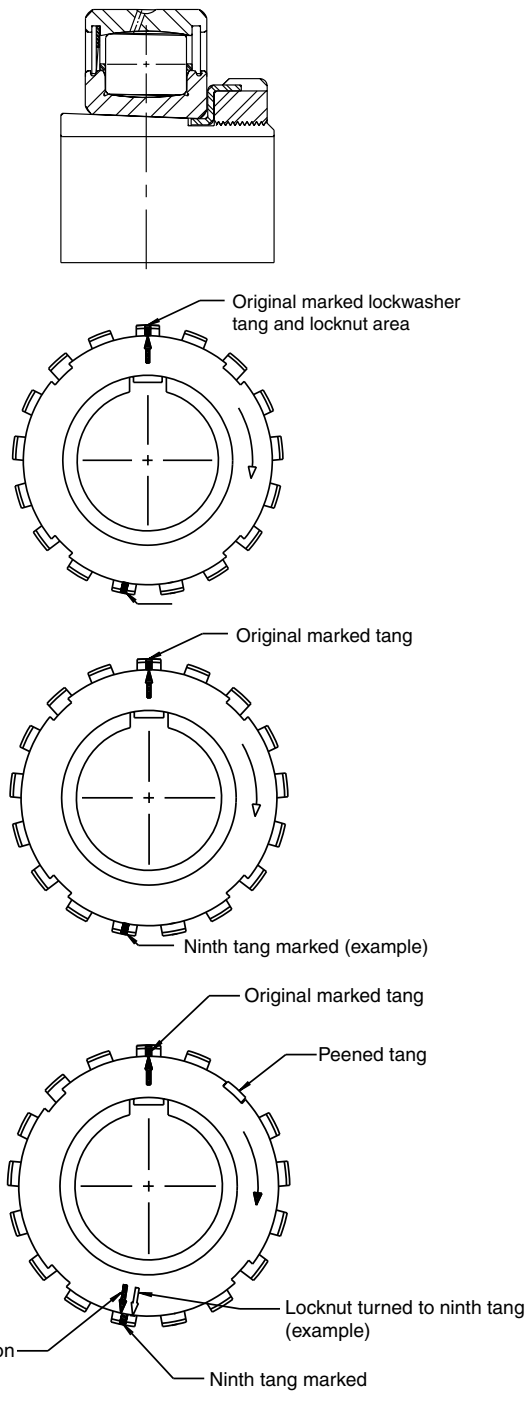


SPHERE-ROL® SPHERICAL ROLLER BEARINGS SUGGESTED MOUNTING PROCEDURE

The mounting procedure for tapered bore adapter mounted bearings recommended by McGILL does not require the use of a feeler gauge or special gauging procedure. The principle of this measurement system is the use of the lock nut and lock washer as a protractor device. The basic procedure is as follows:



⚠ WARNING

Failure to read & follow all instructions could result in malfunction, injury, or property damage.

1. To reduce friction and facilitate mounting, apply a medium weight oil to the bearing bore, the outside diameter of the adapter sleeve, all threads and the face of the lock nut.
2. Mount the bearing on the tapered seat of the adapter sleeve with the lock nut and lock washer mounted snugly against the face of the bearing inner ring. (A snug fit is obtained when the adapter sleeve no longer rotates when the lock nut is tightened by hand.)
3. Mark a lock washer tang in any suitable manner, and the adjacent, mating area of the lock nut.
4. Count in the direction of tightening a certain number of tangs specified in the chart on page 2.
5. Mark the specified lock washer tang.
6. Tighten the lock nut until the marked area on the lock nut is in line with the prescribed marked lock washer tang. (Lightly striking the face of the lock nut with a soft steel bar will reduce thread pressure and make tightening easier.)
7. If at this point, none of the tangs line up directly with a corresponding slot in the lock nut OD, rotate the lock nut, in a tightening direction, the additional small amount required to line up the closest slot and tang.
8. The correct internal clearance has now been obtained and the lock washer tang can be peened into the slot of the lock nut, locking the assembly.

Suggested Mounting Procedure

Clearance Reduction Adapter Mounted (-K Suffix)

Shaft Diameter (Adapter Bore) Inches	Bearing Bore MM	Diametral Clearance Reduction Inches	Lock Nut Turns Degrees	ABMA Lock Washer Number	Req'd No. of Lock Washer Tangs for Clearance Reduction
3/4	25	0.0009	277	W-05	10
15/16	30	0.0009	204	W-06	7
1 3/16	35	0.0009	204	W-07	9
1 5/16	40	0.0009	204	W-08	9
1 7/16	45	0.0010	215	W-09	10
1 11/16	50	0.0010	215	W-10	10
1 15/16	55	0.0010	215	W-11	10
2 1/16	60	0.0010	215	W-12	10
2 3/16	65	0.0010	215	W-13	11
2 5/16	70	0.0015	273	W-14	14
2 7/16	75	0.0015	146	W-15	8
2 11/16	80	0.0015	146	W-16	8
2 15/16	85	0.0015	146	W-17	8
3 3/16	90	0.0015	146	W-18	8
3 5/16	95	0.0015	146	W-19	8
3 7/16	100	0.0015	146	W-20	8
3 15/16	110	0.0020	177	W-22	9
4 3/16	120	0.0020	177	W-24	9
4 7/16	130	0.0025	207	W-26	11
4 15/16	140	0.0025	207	W-28	11
5 3/16	150	0.0030	238	W-30	13

The satisfactory performance and life of this bearing depends upon proper installation. Proper caution should be exercised during installation to guard against the cramping of one bearing against another. Under no circumstances should an axial preload be allowed due to improper installation.

This can be checked by:-

1. Endplay - Check for endwise “shake” which when present shows that the bearings as installed have endplay.
 -or-
2. Ease of Rotation - Rotate assembly by hand. The bearing must be free from unusual drag or noises.

⚠ WARNING

Disconnect and lock out all power before installation and servicing. Moving components could result in property damage, serious injury, or death.