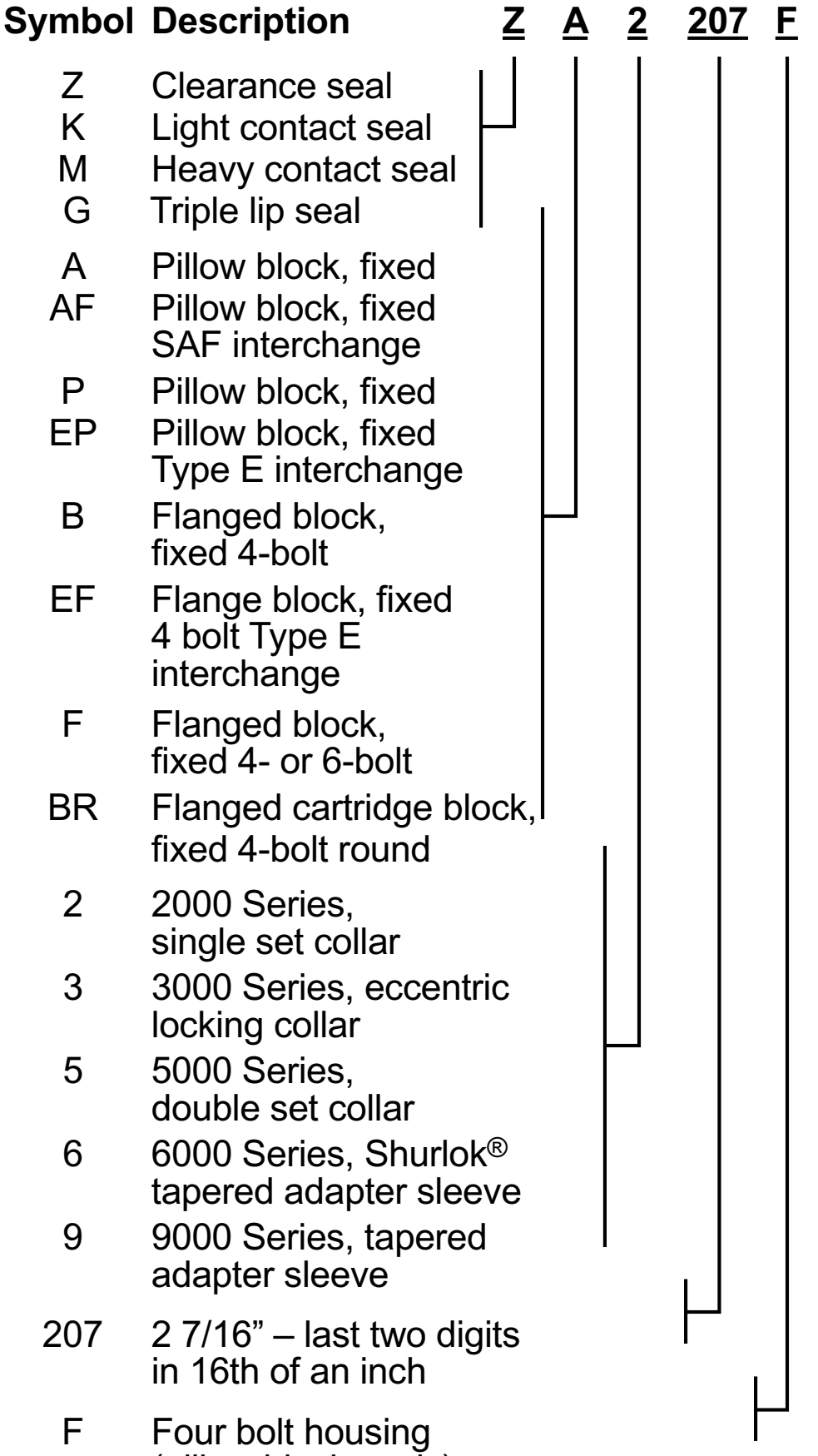
REXNORD

The Bearing

Field Guide

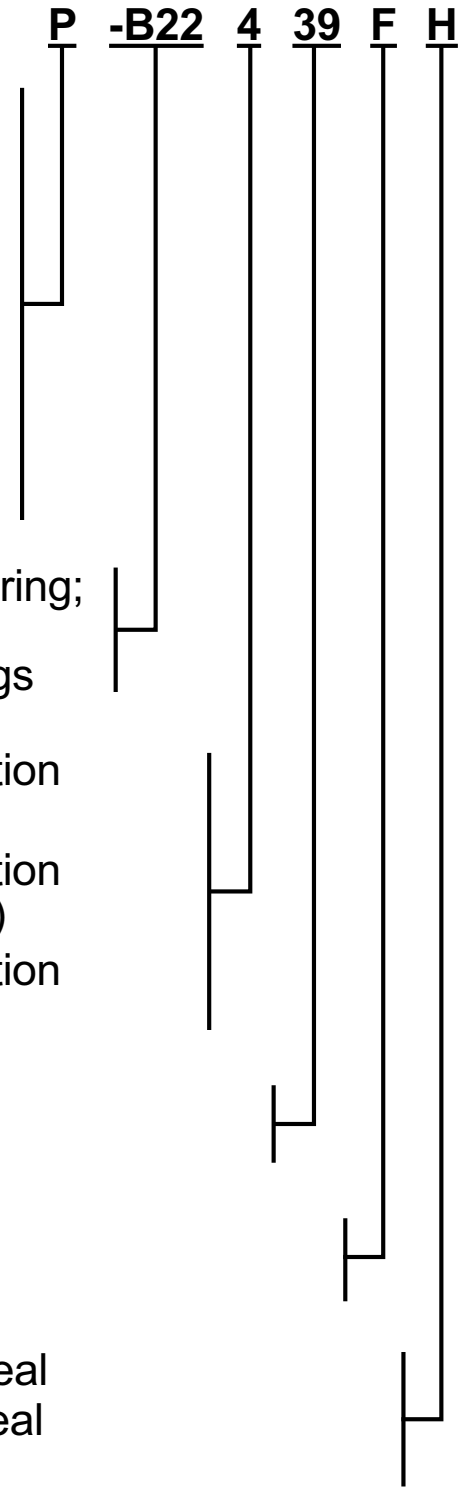
Rex® Link-Belt®

Rex Nomenclature



Symbol	Description
Z	Clearance seal
K	Light contact seal
M	Heavy contact seal
G	Triple lip seal
A	Pillow block, fixed
AF	Pillow block, fixed SAF interchange
P	Pillow block, fixed
EP	Pillow block, fixed Type E interchange
B	Flanged block, fixed 4-bolt
EF	Flange block, fixed 4 bolt Type E interchange
F	Flanged block, fixed 4- or 6-bolt
BR	Flanged cartridge block, fixed 4-bolt round
2	2000 Series, single set collar
3	3000 Series, eccentric locking collar
5	5000 Series, double set collar
6	6000 Series, Shurlok® tapered adapter sleeve
9	9000 Series, tapered adapter sleeve
207	2 7/16” – last two digits in 16th of an inch
F	Four bolt housing (pillow blocks only)

Link-Belt Nomenclature



Symbol	Description
EF	Flange unit; 4-bolt square
EP	Pillow block; cast iron
F	Flanged unit; 3- and 4-bolt
FC	Flanged cartridge unit; 4-bolt round
P	Pillow block
B22	Spherical roller bearing; extended inner ring separable outer rings
4	400 series designation (one locking collar)
5	500 series designation (two locking collars)
6	600 series designation (adapter mounted)
39	Shaft diameter in 16ths of an inch
F	Four bolt base pillow block
H	Floating labyrinth seal
E	Spring-loaded lip seal
E7	Triple lip seal

Interchange

Use the charts below to find the corresponding Rex or Link-Belt roller bearing nomenclature between another company's housing style. If you are unsure of the components of your bearing, contact one of our many trained Rexnord Customer Care Specialists today for assistance.

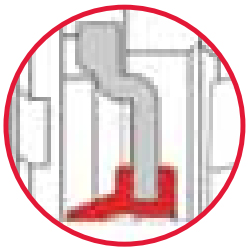
	Housing Style				
Bearing Type	Pillow Block - Standard 2 bolt	Pillow Block - Standard 4 bolt	Pillow Block - Type "E"	Flange Block - 4 bolt	Flange Block - Type "E"
Rex	ZAXXXX	ZAXXXXF	ZEPXXXX	ZBXXXX	ZEFXXXX
Link-Belt	PB22XXXH	PB22XXXFH	EPB22XXXH	FB22XXXH	EFRB22XXXH
Dodge	P2B-S2-XXX	P4B-S2-XXX	P2B-E-XXX	FB-S2-XXX	FB-E-XXX
SKF	SYRX	FSYRX	SYEX	FYRX	FYEX
Browning	SPB1000NEX	SPB1000FNEX	PBE920X	SFB1000NEX	FBE920X
Sealmaster	RPBXXX2	RPBXXX4	ERPBXXX2	RFBAXXX	RFBXXX

	Housing Style				
Bearing Type	**A** Piloted Flange	**B** Flange Bracket	**C** Takeup- Center Pull	**D** Takeup- Protected Screw	**E** Takeup Frame- Protected Screw
Rex	ZBRXXXX	N/A	ZTX-XXX ZTXX-XXX	ZNX-XXXX ZNXX-XXX	N/A
Link-Belt	FCB22XXXH	FBB22XXXH	TB22XXXH	DSB22XXXH	LHD
Dodge	FC-S2-XXX	NONE	WSTU-S2-XXX	TPHU-S2-XXX	HD
SKF	FYRPX	NONE	TBRX	TRHX	TFT
Browning	SFC1000NEX	NONE	STU1000NEX TUE920X	TU900X	T2000
Sealmaster	RFPAXXX	NONE	STUXXXX USTU5000X	NONE	NONE

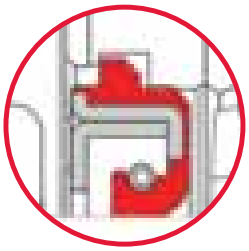
*XXX - *Indicates Series/shaft size*

Seals

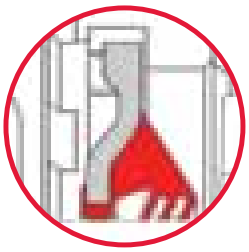
Rex® Seals*



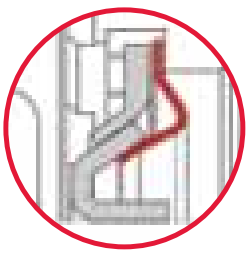
Rex K Seal Light Contact Seal



Rex M Seal Heavy Contact Seal

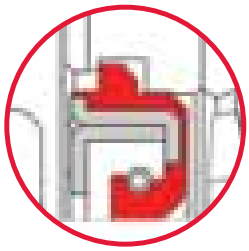


Rex G Seal Triple Lip Seal

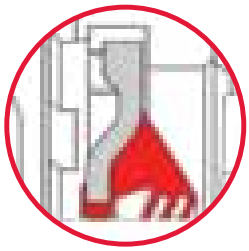


Rex Z Seal Non-Contact Seal

Link-Belt® Seals**



Link-Belt E Seal Heavy Contact Seal



Link-Belt E7 Seal Triple Lip Seal

Link-Belt H Seal Non-Contact Seal

**Additional Rex seal options available. Contact a Rexnord Customer Care Specialist for more information*

***Three proven seal choices*

Bearing Seal Replacement Guide

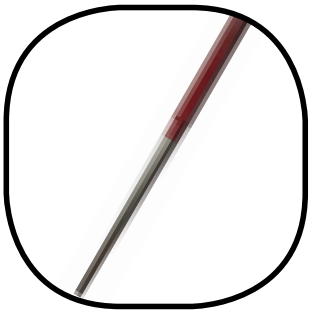
Step A: Applies to Seals Z, K, H, G, and E7 Replacement

Tools Needed: Safety glasses, screwdrivers (very small flathead to remove snap ring and seal, large flat or Phillips to remove Micro-Lok), tools to remove shaft locking device.

Safety Glasses

Phillips Screwdriver

Flathead Screwdriver

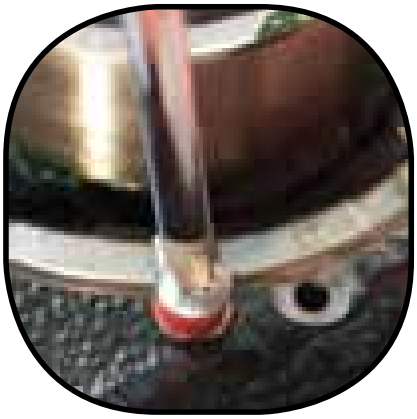


Drift / Flat-Nosed Punch

Ball Peen Hammer

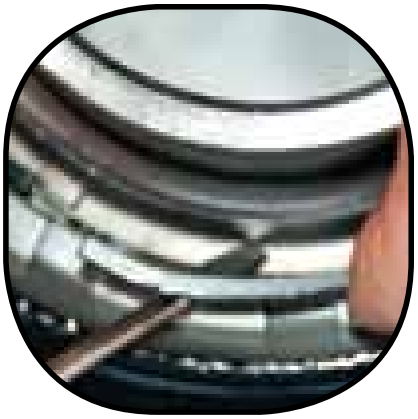
1. Remove shaft-locking device.

2. Place pillow block on face (lay flat on back).



3. Remove Micro-Lok key, washer and screw. Keep washer in screw and do not lose.

4. Mark Micro-Lok position by marking slot in threaded cover and hole in housing.



5. Remove snap ring. Place small flathead screwdriver tip behind the bend of the snap ring; place hand over the face of the bearing to maintain control of the snap ring. Refer to page 12 for step 5 if replacing an M or E seal.

6. Walk seal out of bearing past inner race hubs using small flathead screwdriver.

7. Place Z,K,H,G, or E7 seal in place
- **a.** Make sure raised indent on seal is in front.
- **b.** Slide over inner race hub until back face of seal hits seal groove face.
- **c.** If installing M or E seal, go to ***Step B.***

Note: Raised indent and final position of snap ring.

8. Replace snap ring. Start snap ring into housing groove up against raised tab in seal. Wind snap ring into place until completely seated in groove. Use flathead screw driver to push on snap ring to make sure it has popped into the seal groove all the way around. Make sure raised tab of seal is between the two snap ring ends. If not, use flathead screwdriver to move seal tab between ends of snap ring.

9. Replace Micro-Lok key, screw and washer into marked position. If threaded cover has rotated during seal installation, rotate back to marked position. Make sure compression washer is between screw head and key, and that the bend is down on the Micro-Lok key. Tighten screw until washer is compressed.
Caution: *Do not overtighten.*

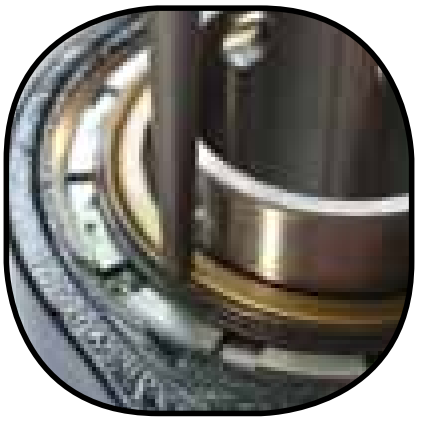
Step B: If Replacing Z, K, H, G, or E7 with M or E Seal

Placing an M or E Seal in the Bearing

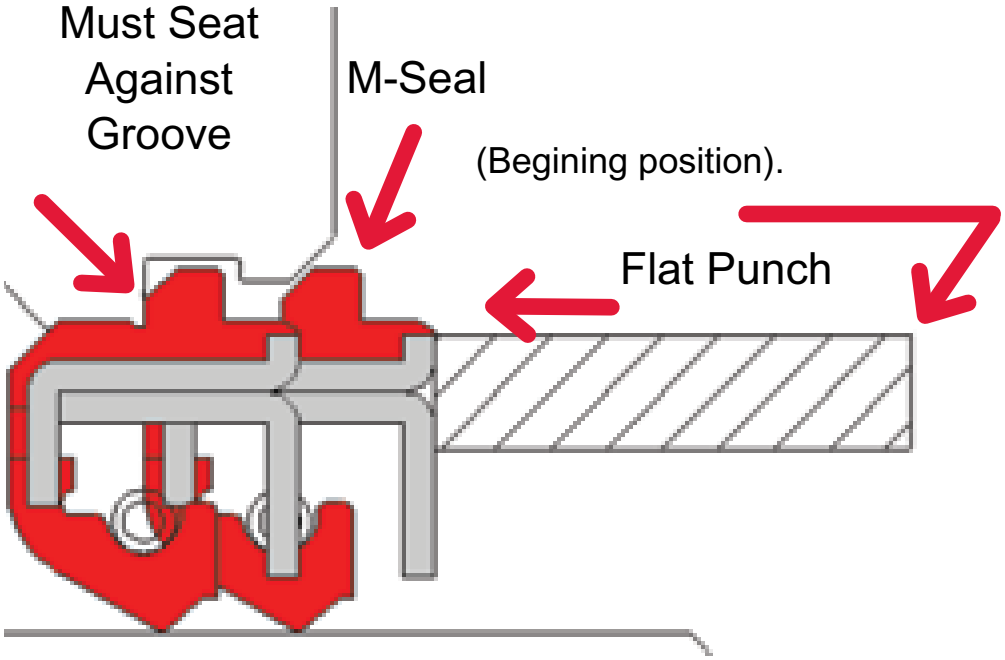
Follow Steps 1 – 7 in *Step A*;
Continue steps 10 – 12 below.

Tools Needed: Safety glasses, flat nosed punch, ball peen hammer.

10. With the metal side out, push M or E over inner race hub until it rests on housing.

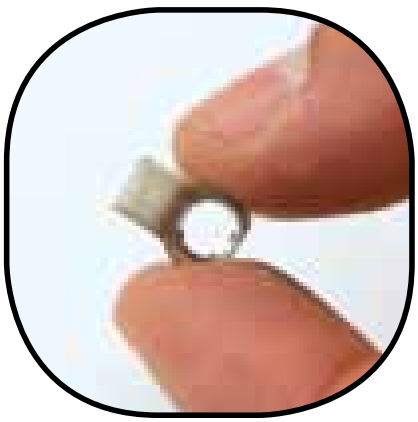


11. Place flat nose punch over junction of two metal pieces. Begin bumping the seal free while moving punch around seal in 90° increments until seal is completely seated in seal groove of housing. Refer to diagram at top of next page.



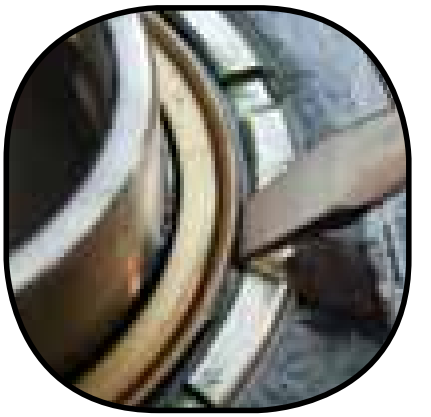
Key is making sure the rubber is seated all the way into the groove.

12. Replace Micro-Lok key, screw and washer into marked position. If threaded cover has rotated during seal installation, rotate back to marked position. Make sure compression washer is between screw head and key, and the bend is down on the Micro-Lok key. Tighten screw until washer is compressed.
Caution: *Do not overtighten.*



How to Remove M or E Seal

Tools Needed: Safety glasses, large flathead screwdriver.



1. Place screwdriver between the junction of the metal and rubber at the outside diameter of the seal.

2. Pry seal using a rotating motion of the screwdriver until seal pops out of housing groove. Will need to pry in several locations to completely pop seal out of groove in housing. Refer to page 10 for installation of new seal.

Rexnord Setting Clearance

Steps A – C (i, ii, iii)

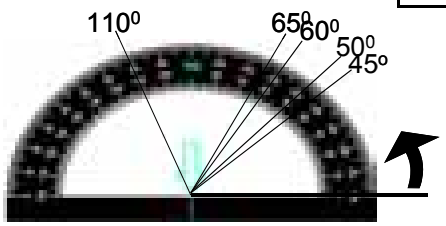
NOTE: Tight settings are to the left.
Loose settings are to the right.

REXNORD **Setting Clearance**

PART NO	REV	PROCESS NAME					
Roller Bearing	8	Setting clearance					
BUSINESS UNIT	**PROCESS**	**W/C**	**MACH #**	**PART TYPE**	**MFG APPROVAL**	**DATE**	
Assembly	Set clearance	Roller		roller	J. Peek	12/15/2010	
PROCESS DESCRIPTION					**QC APPROVAL**	**DATE**	
Watson axial clearance settings					J. Peek	12/15/2010	

	REX (DG) SHAFT SIZE			LINK-BELT FAMILY SIZE		Clearance Symbol					
							Link (STD)	REX (DG) (STD)	6000 & [illegible] Series (STD)		
Size Code	2000, 3000 6000	5000	9000	B22**400**	B22**500**	**2**	**0**	**3**	**4**	**5**	**6**
2	012 - 100	-----	-----	12 - 17		25	35	45	55	65	75
3	102 - 104	-----	-----	18 - 20		30	40	50	60	75	85
4	107 - 108	107	-----	21 - 24	23	35	45	55	65	80	95
5	111 - 112	108-111	-----	25 - 28	24 - 27	40	50	60	70	95	115
6	115 - 200	115	-----	29 - 32	28 - 31	45	65	85	105	115	135
7	203 - 204	200-203	115 - 200	33 - 36	32 - 35	30	45	60	75	85	95
8	206 - 208	207	203	37 - 40	36 - 39	35	50	65	80	95	105
9	211 - 300	208-215	207 - 208	41 - 48	40 - 47	40	60	80	100	120	145
10	303 - 308	303-307	211 - 300	49 - 56	48 - 55	50	75	100	125	140	160
11	311 - 400	311-400	303 - 307	57 - 64	56 - 64	60	90	120	150	170	190
12	403 - 408	403-408	311 - 400		65 - 72	40	60	80	100	115	135
13	415 - 500	415-500	403 - 407		73 - 80	50	75	90	115	135	155
14	507	507	415 - 500		88	55	80	90	120	145	165
15	515 - 600	515 - 600	503 - 507		96	70	95	120	150	180	210
16	607 - 700	607 - 700	515 - 607		112	80	110	150	180	220	255

Set clearance to nearest notch.



A. You must know what brand, series, shaft size or size code. The example we are using is Rex 2000 series 2 7/16” shaft, size code 8.

Clearance Symbol				
	Link Belt (STD)	REX (DG) (STD)	6000 & 9000 Series (STD)	
2	**0**	**3**	**4**	**5**
25	35	45	55	65
30	40	50	60	75
35	45	55	65	80
40	50	60	70	95

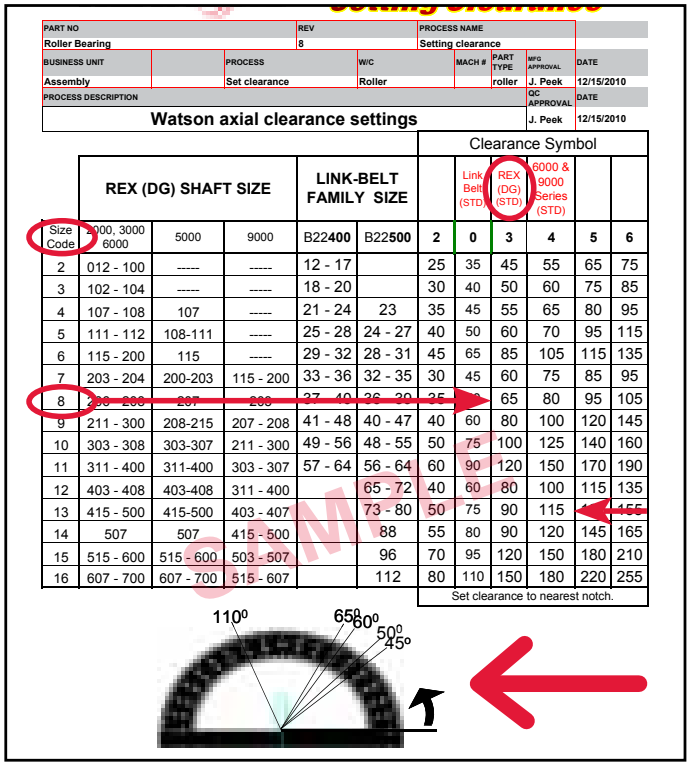
B. Review ***"REX (STD)." (STD)*** means standard clearance setting from factory.

	REX (DG) SHAFT SIZE		
Size Code	2000, 3000 6000	5000	9000
2	012 - 100	-----	-----
3	102 - 104	-----	-----
4	107 - 108	107	-----
5	111 - 112	108-111	-----
6	115 - 200	115	-----
7	203 - 204	200-203	115 - 200
8	206 - 208	207	203
9	211 - 300	208-215	207 - 208
10	303 - 308	303-307	211 - 300

C. In this example find size code 8.

i. Move across chart to column Rex (STD) and note the angle of rotation; in this case, 65°.

Size Code	2000, 3000 6000	5000	9000	B22**400**
2	012 - 100	-----	-----	12 - 17
3	102 - 104	-----	-----	18 - 20
4	107 - 108	107	-----	21 - 24
5	111 - 112	108-111	-----	25 - 28
6	115 - 200	115	-----	29 - 32
7	203 - 204	200-203	115 - 200	33 - 36
8	[illegible]	[illegible]	203	37 - 40
9	211 - 300	208-215	207 - 208	41 - 48
10	303 - 308	303-307	211 - 300	49 - 56
11	311 - 400	311-400	303 - 307	57 - 64
12	403 - 408	403-408	311 - 400	
13	415 - 500	415-500	403 - 407	
14	507	507	415 - 500	
15	515 - 600	515 - 600	503 - 507	



PART NO	REV	PROCESS NAME					
Roller Bearing	8	Setting clearance					
BUSINESS UNIT	PROCESS	W/C	MACH #	PART TYPE	MFG APPROVAL	DATE	
Assembly	Set clearance	Roller		roller	J. Peek	12/15/2010	
PROCESS DESCRIPTION					QC APPROVAL	DATE	
Watson axial clearance settings					J. Peek	12/15/2010	

	REX (DG) SHAFT SIZE			LINK-BELT FAMILY SIZE		Clearance Symbol					
							Link Belt (STD)	REX (DG) (STD)	6000 & 9000 Series (STD)		
Size Code	2000, 3000 6000	5000	9000	B22**400**	B22**500**	2	0	3	4	5	6
2	012 - 100	-----	-----	12 - 17		25	35	45	55	65	75
3	102 - 104	-----	-----	18 - 20		30	40	50	60	75	85
4	107 - 108	107	-----	21 - 24	23	35	45	55	65	80	95
5	111 - 112	108-111	-----	25 - 28	24 - 27	40	50	60	70	95	115
6	115 - 200	115	-----	29 - 32	28 - 31	45	65	85	105	115	135
7	203 - 204	200-203	115 - 200	33 - 36	32 - 35	30	45	60	75	85	95
8	[illegible]	[illegible]	203	[illegible]	[illegible]	[illegible]	[illegible]	65	80	95	105
9	211 - 300	208-215	207 - 208	41 - 48	40 - 47	40	60	80	100	120	145
10	303 - 308	303-307	211 - 300	49 - 56	48 - 55	50	75	100	125	140	160
11	311 - 400	311-400	303 - 307	57 - 64	56 - 64	60	90	120	150	170	190
12	403 - 408	403-408	311 - 400		65 - 72	40	60	80	100	115	135
13	415 - 500	415-500	403 - 407		73 - 80	50	75	90	115	[illegible]	[illegible]
14	507	507	415 - 500		88	55	80	90	120	145	165
15	515 - 600	515 - 600	503 - 507		96	70	95	120	150	180	210
16	607 - 700	607 - 700	515 - 607		112	80	110	150	180	220	255

Set clearance to nearest notch.

ii. Looser settings are to the right. Move one column to right and note angle; in this case, 80°.

iii. Subtract the two angles (80 - 65 = 15°). This is the amount of rotation counterclockwise to loosen threaded cover.

Loosening

When to Adjust

Looser Clearance

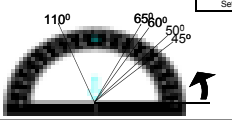
- High-speed
- High-temperature

Tools Needed: Safety glasses, screwdriver (Phillips & flathead), hammer, dead-blow hammer, Rexnord setting clearance chart, block of wood to support bearing housing unit.

REXNORD **Setting Clearance**

PART NO			REV		PROCESS NAME					
Roller Bearing			8		Setting clearance					
BUSINESS UNIT		PROCESS		W/C	MACH #	PART TYPE	MFG APPROVAL	DATE		
Assembly		Set clearance		Roller		roller	J. Peek	12/15/2010		
PROCESS DESCRIPTION							QC APPROVAL	DATE		
Watson axial clearance settings							J. Peek	12/15/2010		

	REX (DG) SHAFT SIZE			LINK-BELT FAMILY SIZE		Clearance Symbol					
							Link Belt (STD)	REX (DG) (STD)	6000 & 9000 Series (STD)		
Size Code	2000, 3000 6000	5000	9000	B22400	B22500	2	0	3	4	5	6
2	012 - 100	-----	-----	12 - 17		25	35	45	55	65	75
3	102 - 104	-----	-----	18 - 20		30	40	50	60	75	85
4	107 - 108	107	-----	21 - 24	23	35	45	55	65	80	95
5	111 - 112	108-111	-----	25 - 28	24 - 27	40	50	60	70	95	115
6	115 - 200	115	-----	29 - 32	28 - 31	45	65	85	105	115	135
7	203 - 204	200-203	115 - 200	33 - 36	32 - 35	30	45	60	75	85	95
8	206 - 208	207	203	37 - 40	36 - 39	35	50	65	80	95	105
9	211 - 300	208-215	207 - 208	41 - 48	40 - 47	40	60	80	100	120	145
10	303 - 308	303-307	211 - 300	49 - 56	48 - 55	50	75	100	125	140	160
11	311 - 400	311-400	303 - 307	57 - 64	56 - 64	60	90	120	150	170	190
12	403 - 408	403-408	311 - 400		65 - 72	40	60	80	100	115	135
13	415 - 500	415-500	403 - 407		73 - 80	50	75	90	115	135	155
14	507	507	415 - 500		88	55	80	90	120	145	165
15	515 - 600	515 - 600	503 - 507		96	70	95	120	150	180	210
16	607 - 700	607 - 700	515 - 607		112	80	110	150	180	220	255
						Set clearance to nearest notch.					



Rexnord Setting Clearance Chart

Safety Glasses

Flathead Screwdriver

Ball Peen Hammer

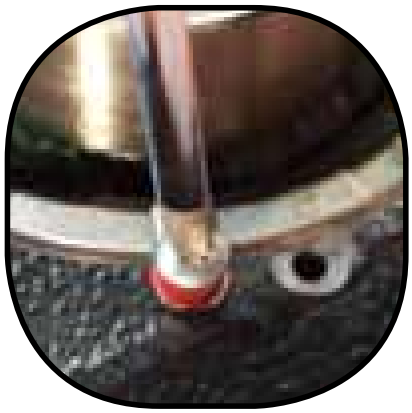
Phillips Screwdriver

Drift / Flat-Nosed Punch

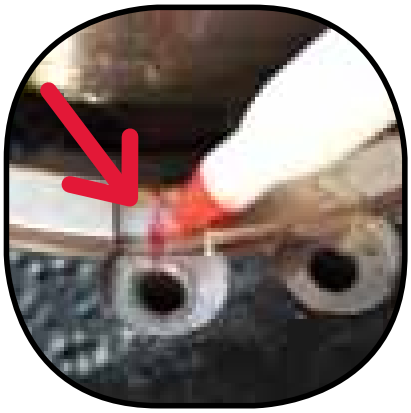
Dead-Blow Hammer

Supports for Bearing Back

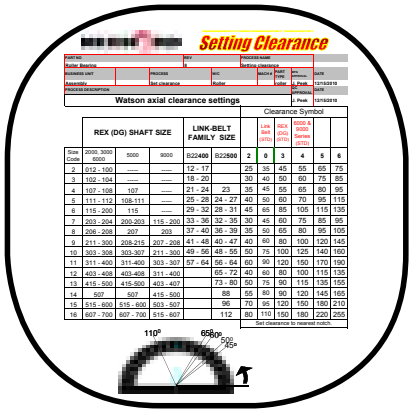
1. Remove shaft-locking device.



2. Remove Micro-Lok key, screw and washer. Make sure not to lose washer.



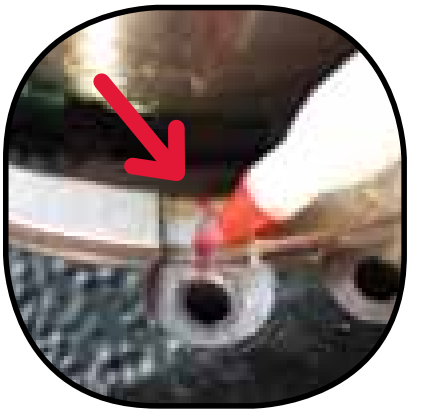
3. Mark position on threaded cover and housing.



4. To adjust one setting loose, reference ***"Rexnord Setting Clearance Chart"*** for Steps A – C (i, ii, iii).

After reviewing *"Rexnord Setting Clearance Chart" continue onto steps 5-12.*

5. Noting the original marks, loosen threaded cover 15° using a hammer and flat screwdriver. For reference, the holes in the housing are spaced at 15°, and slots in the threaded cover are spaced at 30°.



6. Re-mark the new position for future reference.

7. Turn housing over and provide supports so inner race on opposite side sits above table.

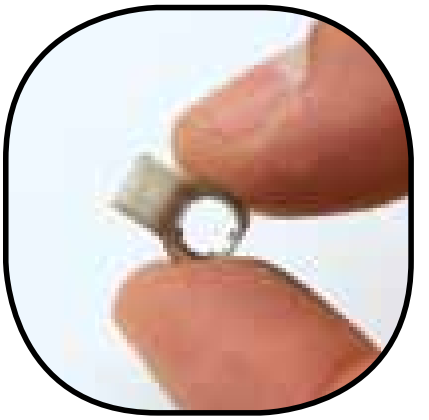
8. Remove seal per seal removal instructions.

9. Place a block of wood, which just fits over the face of the inner ring, on the inner ring face.

10. Using a hammer, hit the block of wood with several sharp blows, trying to keep inner race square to housing. This procedure moves the outer race up against the threaded cover, which was just loosened.

11. After hitting, turn bearing over and try to rotate threaded cover clockwise by hand. If it does not move, clearance has been set properly. If threaded cover moves, move it back to loosened position and repeat steps ***9*** and ***10*** until threaded cover will not rotate clockwise by hand. ***(In some cases, an arbor press may be required to perform steps 9 and 10)***.

12. Once clearance is set, install Micro-Lok assembly, making sure compression washer is between screw head and key, and the bend is down on the Micro-Lok key. Tighten screw until washer is compressed.



Tightening

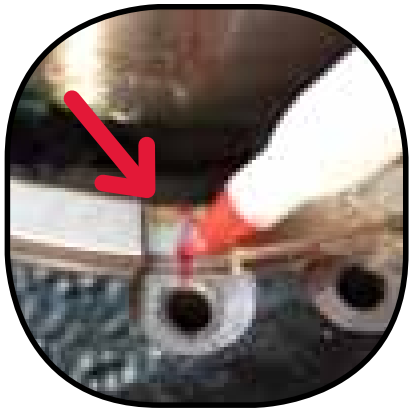
When to Adjust

Tightening Clearance

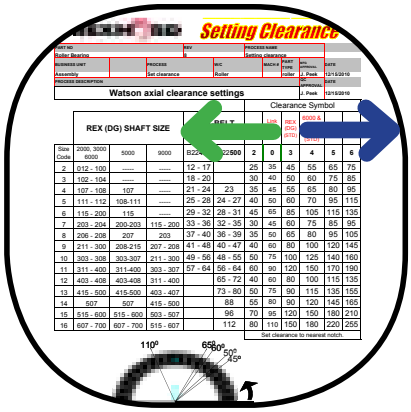
- Impact or shock loads
- Minimize shaft movement or run-out
- Noise reduction in vibratory applications

1. Remove shaft-locking device.

2. Remove Micro-Lok key, screw and washer. Make sure not to lose washer.



3. Mark position on threaded cover and housing.



4. To adjust one setting tight, reference ***"Rexnord Setting Clearance Chart" for Steps A – C (i, ii). See iii on next page.*** *NOTE: Tight settings are to the left. Loose settings are to the right.*

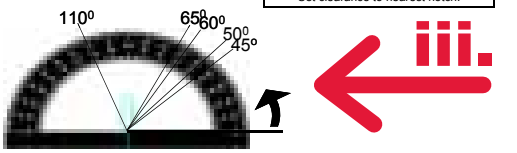
PART NO	REV	PROCESS NAME
Roller Bearing	8	Setting clearance

BUSINESS UNIT	PROCESS	W/C	MACH #	PART TYPE	MFG APPROVAL	DATE
Assembly	Set clearance	Roller		roller	J. Peek	12/15/2010

PROCESS DESCRIPTION	QC APPROVAL	DATE
Watson axial clearance settings	J. Peek	12/15/2010

	REX (DG) SHAFT SIZE			LINK-BELT FAMILY SIZE		Clearance Symbol					
							Link-Belt (STD)	REX (DG) (STD)	6000 & 9000 Series (STD)		
Size Code	3000, 3000 6000	5000	9000	B22**400**	B22**500**	**2**	**0**	**3**	**4**	**5**	**6**
2	012 - 100	-----	-----	12 - 17		25	35	45	55	65	75
3	102 - 104	-----	-----	18 - 20		30	40	50	60	75	85
4	107 - 108	107	-----	21 - 24	23	35	45	55	65	80	95
5	111 - 112	108-111	-----	25 - 28	24 - 27	40	50	60	70	95	115
6	115 - 200	115	-----	29 - 32	28 - 31	45	65	85	105	115	135
7	203 - 204	200-203	115 - 200	33 - 36	32 - 35	30	45	60	75	85	95
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	65	80	[illegible]	[illegible]
9	211 - 300	208-215	207 - 208	41 - 48	40 - 47	40	60	80	100	120	145
10	303 - 308	303-307	211 - 300	49 - 56	48 - 55	50	75	100	125	140	160
11	311 - 400	311-400	303 - 307	57 - 64	56 - 64	60	90	120	150	170	190
12	403 - 408	403-408	311 - 400		65 - 72	40	60	80	100	115	135
13	415 - 500	415-500	403 - 407		73 - 80	50	75	90	115	135	155
14	507	507	415 - 500		88	55	80	90	120	145	165
15	515 - 600	515 - 600	503 - 507		96	70	95	120	150	180	210
16	607 - 700	607 - 700	515 - 607		112	80	110	150	180	220	255

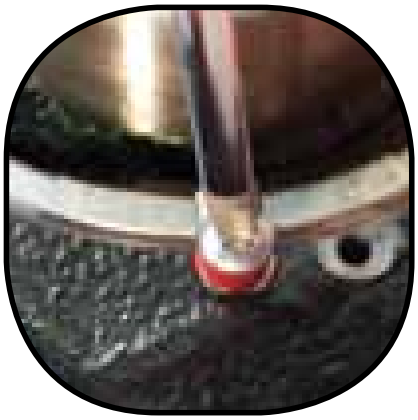
Set clearance to nearest notch.



iii. Subtract the two angles. 65 - 50 = 15°. This is the amount of rotation clockwise to tighten threaded cover.

After reviewing "Rexnord Setting Clearance Chart, i., ii.," continue onto steps 5-6.

5. Noting the original marks, tighten threaded cover 15° using a hammer and flat screwdriver. For reference, the holes in the housing are spaced at 15°, and slots in the threaded cover are spaced at 30°.



6. Once clearance is set, install Micro-Lok assembly, making sure compression washer is between screw head and key, and the bend is down on the Micro-Lok key. Tighten screw until washer is compressed.

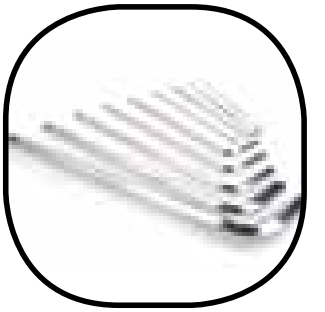
Bearing Installation Guide

Centrik-Lok

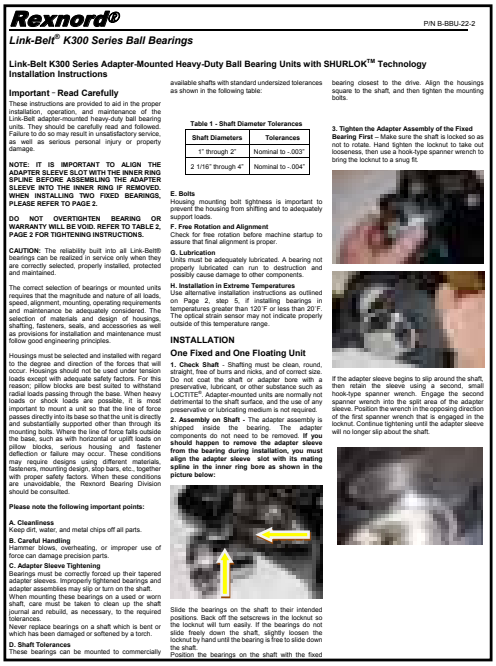
Tools Needed: Safety glasses, torque wrench, proper size hex key.

Safety Glasses

Torque Wrench



Proper Size
Hex Key



Rexnord®

P/N B-BBU-22-2

Link-Belt® K300 Series Ball Bearings

Link-Belt K300 Series Adapter-Mounted Heavy-Duty Ball Bearing Units with SHURLOK™ Technology Installation Instructions

Important - Read Carefully

These instructions are provided to aid in the proper installation, operation, and maintenance of the Link-Belt adapter-mounted heavy-duty ball bearing units. They should be carefully read and followed. Failure to do so may result in unsatisfactory service, as well as serious personal injury or property damage.

NOTE: IT IS IMPORTANT TO ALIGN THE ADAPTER SLEEVE SLOT WITH THE INNER RING SPLINE BEFORE ASSEMBLING THE ADAPTER SLEEVE INTO THE INNER RING IF REMOVED. WHEN INSTALLING TWO FIXED BEARINGS, PLEASE REFER TO PAGE 2.

DO NOT OVERTIGHTEN BEARING OR WARRANTY WILL BE VOID. REFER TO TABLE 2, PAGE 2 FOR TIGHTENING INSTRUCTIONS.

CAUTION: The reliability built into all Link-Belt® bearings can be realized in service only when they are correctly selected, properly installed, protected and maintained.

The correct selection of bearings or mounted units requires that the magnitude and nature of all loads, speed, alignment, mounting, operating requirements and maintenance be adequately considered. The selection of materials and design of housings, shafting, fasteners, seals, and accessories as well as provisions for installation and maintenance must follow good engineering principles.

Housings must be selected and installed with regard to the degree and direction of the forces that will occur. Housings should not be used under tension loads except with adequate safety factors. For this reason, pillow blocks are best suited to withstand radial loads passing through the base. When heavy loads or shock loads are possible, it is most important to mount a unit so that the line of force passes directly into its base so that the unit is directly and substantially supported other than through its mounting bolts. Where the line of force falls outside the base, such as with horizontal or uplift loads on pillow blocks, serious housing and fastener deflection or failure may occur. These conditions may require designs using different materials, fasteners, mounting design, stop bars, etc., together with proper safety factors. When these conditions are unavoidable, the Rexnord Bearing Division should be consulted.

Please note the following important points:

A. Cleanliness
Keep dirt, water, and metal chips off all parts.

B. Careful Handling
Hammer blows, overheating, or improper use of force can damage precision parts.

C. Adapter Sleeve Tightening
Bearings must be correctly forced up their tapered adapter sleeves. Improperly tightened bearings and adapter assemblies may slip or turn on the shaft.
When mounting these bearings on a used or worn shaft, care must be taken to clean up the shaft journal and rebuild, as necessary, to the required tolerances.
Never replace bearings on a shaft which is bent or which has been damaged or softened by a torch.

D. Shaft Tolerances
These bearings can be mounted to commercially available shafts with standard undersized tolerances as shown in the following table:

Table 1 - Shaft Diameter Tolerances

Shaft Diameters	Tolerances
1" through 2"	Nominal to - .003"
2 1/16" through 4"	Nominal to - .004"

E. Bolts
Housing mounting bolt tightness is important to prevent the housing from shifting and to adequately support loads.

F. Free Rotation and Alignment
Check for free rotation before machine startup to assure that final alignment is proper.

G. Lubrication
Units must be adequately lubricated. A bearing not properly lubricated can run to destruction and possibly cause damage to other components.

H. Installation in Extreme Temperatures
Use alternative installation instructions as outlined on Page 2, step 5, if installing bearings in temperatures greater than 120 F or less than 20 F. The optical strain sensor may not indicate properly outside of this temperature range.

INSTALLATION

One Fixed and One Floating Unit

1. Check Shaft - Shafting must be clean, round, straight, free of burrs and nicks, and of correct size. Do not coat the shaft or adapter bore with a preservative, lubricant, or other substance such as LOCTITE®. Adapter-mounted units are normally not detrimental to the shaft surface, and the use of any preservative or lubricating medium is not required.

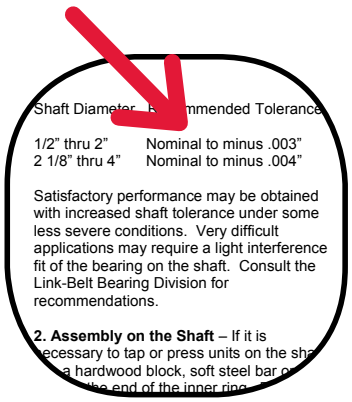
2. Assembly on Shaft - The adapter assembly is shipped inside the bearing. The adapter components do not need to be removed. **If you should happen to remove the adapter sleeve from the bearing during installation, you must align the adapter sleeve slot with its mating spline in the inner ring bore as shown in the picture below:**

Slide the bearings on the shaft to their intended positions. Back off the setscrews in the locknut so the locknut will turn easily. If the bearings do not slide freely down the shaft, slightly loosen the locknut by hand until the bearing is free to slide down the shaft.
Position the bearings on the shaft with the fixed bearing closest to the drive. Align the housings square to the shaft, and then tighten the mounting bolts.

3. Tighten the Adapter Assembly of the Fixed Bearing First – Make sure the shaft is locked so as not to rotate. Hand tighten the locknut to take out looseness, then use a hook-type spanner wrench to bring the locknut to a snug fit.

If the adapter sleeve begins to slip around the shaft, then retain the sleeve using a second, small hook-type spanner wrench. Engage the second spanner wrench into the split area of the adapter sleeve. Position the wrench in the opposing direction of the first spanner wrench that is engaged in the locknut. Continue tightening until the adapter sleeve will no longer slip about the shaft.

1. Review service instructions: *Link-Belt® Series CL 200 Centrik-Lok® (B-BBU-20-A.)*



Shaft Diameter … mmended Tolerance

1/2" thru 2" Nominal to minus .003"
2 1/8" thru 4" Nominal to minus .004"

Satisfactory performance may be obtained with increased shaft tolerance under some less severe conditions. Very difficult applications may require a light interference fit of the bearing on the shaft. Consult the Link-Belt Bearing Division for recommendations.

2. Assembly on the Shaft – If it is necessary to tap or press units on the sha… a hardwood block, soft steel bar o… the end of the inner ring …

2. Make sure shaft is clean, round, and free of burrs and nicks; check size per installation instructions.

3. Slide bearings onto shaft and position. Lightly bolt housings to mounting structure.

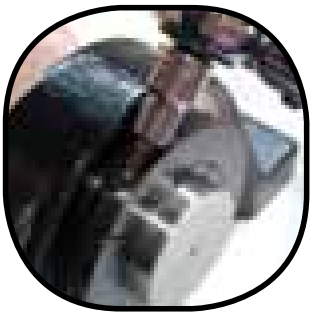
Recommended Collar Screw Torque			
Shaft Size (in)	Screw Size	Socket Size	Inch-Pounds
3/4 - 1 3/16	#10	5/32	65 - 72
1 1/4 - 1 3/4	1/4	3/16	151 - 168
1 7/8 - 2 7/16	5/6	1/4	313 - 348

4. Align bearing units and securely fasten to mounting structure.

5. Find collar screw torque in service instructions.

6. Set torque wrench to proper torque.

7. Snug both collar screws.



8. Incrementally tighten collar screws by tightening one screw slightly more than the other until the specified torque is reached.

Bearing Installation Guide

SHURLOK®

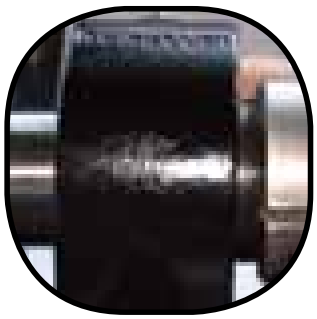
Tools Needed: Safety glasses, proper size hex key for set screw in nut, impact SHURLOK tool, “C” type SHURLOK tool with breaker bar or hammer and drift.

Table 1 - Shaft Diameter Tolerances

Shaft Diameters	Tolerances
1” through 2”	Nominal to -.003”
2 1/16” through 4”	Nominal to -.004”

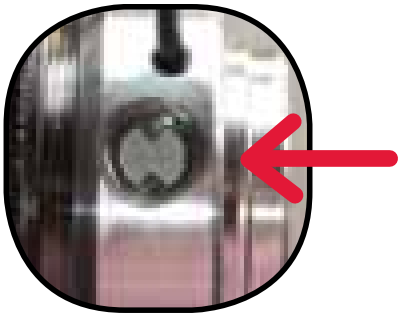
1. Review service instructions: ***Link-Belt Series K300 Series Ball Bearings Installation Instruction Number P/N B-BBU-22-2*** or ***Rex Shurlok 6000 Series Installation Instructions 105-99501-19.***

2. Make sure shaft is clean, round, and free of burrs and nicks and on size, per installation instructions.



3. Loosen set screws in SHURLOK locknut.

4. Back-off locknut so bearing will slide onto shaft easily. Make sure locknut is still engaged with threads on inner ring.



5. Check Spyglass™ Optical Strain Sensing Technology (OSS) – make sure the eye is clear.

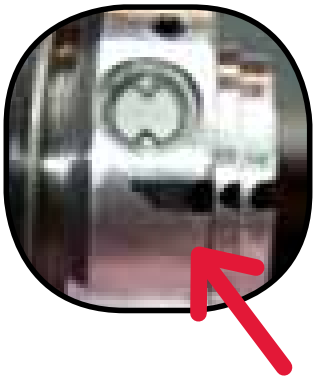
6. In general when mounting SHURLOK product, fixed and expansion bearings are used.

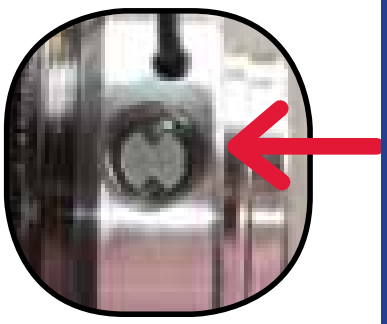
7. Slide bearings onto shaft and position. Fixed bearing generally is positioned closest to drive.

8. Tighten mounting bolts to mounting structure. This assumes the use of fixed and expansion bearings. Refer to service instructions for two fixed bearings.

9. Tighten adapter assembly of fixed unit first.

10. Hand-tighten locknut to take out the looseness, then snug using SHURLOK installation tools or hook spanner. This process removes the clearance between the shaft, sleeve and inner race.



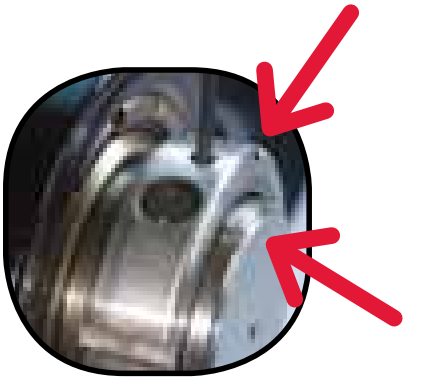


11. Once snug, mark position of the locknut, sleeve and shaft with a marker.

12. Rotate locknut clockwise ½ turn using SHURLOK tools or a hammer and drift. Check the eyes for any color change. Always check both indicators.

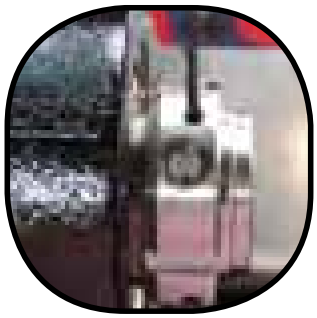
13. Using the impact spanner, the ”C” tool, breaker bar or hammer and drift, tighten locknut in 1/8 turn increments. Inspect both eyes for color change. (Only one eye needs to show color so you must check both eyes). Any color change as per the installation instructions is good. Continue this process until you see color change in one of the eyes in the locknut. If the color changes before you have reached the minimum locknut adjustment per the service instructions continue tightening locknut in 1/8-turn increments until minimum is achieved.

WRONG



CORRECT

14. Check set screw location to make sure they are not over the slot in the adapter sleeve. If they are, tighten locknut until screw clears slot.



15. Tighten set-screws using the torque table in the service instructions or use a hex key and tighten until hex key yields.

16. Repeat process for expansion unit, only make sure to center expansion cartridge in center of housing.

Note: **Once set-screws are tightened, the OSS eye may become clear or darker. This is normal.**

866-REXNORD
www.rexnord.com

(BR9-001) 08/11