ASSEMBLY OF USAF, USDAF, SAFS & SAF-XT BEARINGS

These instructions must be read thoroughly before installation or operation.

WARNING: To ensure the drive is not unexpectedly started, turn off and lock-out or tag power source before proceeding. Failure to observe these precautions could result in bodily injury.

1. Clean shaft. Slide V-ring seal on shaft with lip toward bearing (for sizes up to 10 1/2" bore only.)
2. Slide seal ring on the shaft with largest OD toward bearing. For sizes larger than 10" ER ring replaces V-ring and seal ring.
3. Position adapter sleeve on shaft, thread outboard to approximate location with respect to required centerline.
4. Coat OD of adapter sleeve with a light oil. It will facilitate mounting.
5. Measure the internal clearance of the bearing at the 12 o'clock position before mounting, then position bearing on the adapter sleeve. Locate bearing in proper position on shaft.
6. Install the lockwasher (8" and smaller sizes only) on the adapter with inner prong located in the slot and toward the bearing. Install locknut, chamfered face toward bearing.
7. Tighten locknut using a spanner wrench and hammer or drift pin until clearance measured in Step 5 is reduced by amount shown in Table. While tightening, measure clearance a the 6 o'clock position. During this step, shaft must be supported so all weight is off of the bearing.
8. Find a lockwasher tab that aligns with a locknut slot and bend tab into slot. If slot is past tab then tighten, not loosen, locknut to meet a washer tab.
9. Sizes larger than 8" require a lockplate bolted to the locknut with the inner prong of the place located in the slot of the adapter sleeve. If necessary, tighten, not loosen, locknut to allow prong to fit in adapter slot.
10. Install a second seal ring with large OD toward locknut*.
11. Slide second V-ring seal onto the shaft, again making certain lip is toward bearing. Do not install V-ring seal on seal ring until housing cap has been set in place and tightened. For sizes larger than 10" ER ring replaced V-ring and seal ring.
12. Apply grease to the bearings and seal rings. The lubricant should be packed between the rolling elements. Pack the lower half of the housing one-third (1/3) full for high speed operation, one-half (1/2) full for normal speed operation and 100% full for slow speed operations.
13. Place shaft with bearing into lower half of housing while carefully guiding the seal rings into the housing grooves.
14. Bolt lower half of the non-expansion bearing housing to the base. Move shaft endwise so that stabilizing ring can be inserted between the bearing outer ring and the lower half shoulder on same side as locknut. Make all other bearings on the same shaft expansion by centering in the middle of their housing seat. Bolt expansion housing to base.
15. Grease the bearing seal grooves in the housing cap and place over the bearing after wiping the mating surfaces. The two dowel pins will align the cap and the lower housing half.
16. Tighten cap bolts or nuts to values recommended by bolt manufacturers in accordance with the bolt grade.
17. Assure that there is seal ring running clearance then install V-ring seals onto the seal rings. Make sure V-ring seal lip rides against face of housing. Cover each V-ring seal with a heavy coat of grease.

*If auxiliary seals are used, follow appropriate instruction manual that accompanies auxiliary seal.

WARNING Because of the possible danger to persons(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed. Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by Baldor Electric Company nor are the responsibility of Baldor Electric Company. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

DODGE®

RADIAL CLEARANCE REDUCTION OF DODGE SPHERICAL ROLLER BEARINGS WITH TAPERED BORE									
Nominal Bore		Basic* Bearing Description	Reduction in Radial Clearance (in.)		Radial Clearance Prior to Mounting (in)		Axial Displacement of Bearing Relative to Sleeve (in.)		Smallest Permissible Radial Clearance After Mounting (in)
From	To		Min.	Max.	Min.	Max.	Min.	Max.	
1-7/16	/	22209K	.0010	.0012	.0024	.0031	.018	.020	.0014
1-11/16	/	22210K	.0010	.0012	.0024	.0031	.018	.020	.0014
1-15/16	/	22211K	.0012	.0015	.0030	.0037	.020	.028	.0015
2-3/16	/	22213K	.0012	.0015	.0030	.0037	.020	.028	.0015
2-7/16	2-1/2	22215K	.0016	.0020	.0037	.0047	.028	.033	.0017
2-11/16	2-3/4	22216K	.0016	.0020	.0037	.0047	.028	.033	.0017
2-15/16	3	22217K	.0018	.0025	.0043	.0055	.030	.039	.0024
3-3/16	/	22218K	.0018	.0025	.0043	.0055	.030	.039	.0024
3-7/16	3-1/2	22220K	.0018	.0025	.0043	.0055	.030	.039	.0024
3-15/16	4	22222K	.0020	.0028	.0053	.0067	.031	.047	.0032
4-3/16	/	22224K	.0020	.0028	.0053	.0067	.031	.047	.0032
4-7/16	4-1/2	22226K	.0025	.0035	.0063	.0079	.047	.059	.0036
4-15/16	5	22228K	.0025	.0035	.0063	.0079	.047	.059	.0036
5-3/16	/	22230K	.0030	.0040	.0071	.0091	.051	.067	.0040
5-7/16	5-1/2	22232K	.0030	.0040	.0071	.0091	.051	.067	.0040
5-15/16	6	22234K	.0030	.0045	.0079	.0102	.055	.075	.0045
6-7/16	6-1/2	22236K	.0030	.0045	.0079	.0102	.055	.075	.0045
6-15/16	7	22238K	.0035	.0050	.0087	.0114	.059	.087	.0050
7-1/2	8	22244K	.0040	.0055	.0098	.0126	.067	.094	.0057
8-7/16	9	23048K**	.0045	.0060	.0079	.0106	.071	.102	.0032
9-7/16	9-1/2	23052K**	.0045	.0065	.0087	.0118	.079	.114	.0038
9-15/16	10-1/2	23056K**	.0045	.0065	.0087	.0118	.079	.114	.0038
10-15/16	11	23060K**	.0050	.0075	.0094	.0130	.087	.126	.0038
11-7/16	12	23064K**	.0060	.0085	.0106	.0142	.102	.142	.0038
12-7/16	12-1/2	23068K**	.0060	.0085	.0106	.0142	.102	.1445	.0038
12-15/16	13-1/2	23072K**	.0065	.0090	.0118	.0157	.114	.154	.0048
13-15/16	14	23076K**	.0065	.0090	.0018	.0157	.114	.154	.0048
15	/	23080K**	.0065	.0090	.0118	.0157	.1105	.153	.0048
15-3/4	/	23084K**	.0080	.0105	.0130	.0173	.136	.178	.0048

*222 Series bearings are supplied standard with clearance C3

**230 Series bearings are supplied standard with clearance C0

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