

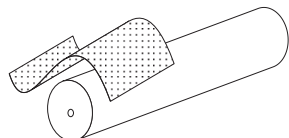
2000 Series Installation Guide

Jones

...Since 1890

Spherical Roller Bearings
Collar Mounted Units
JA, JE, JYR, JYRP, JN, JT

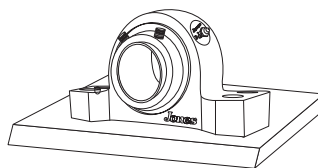
Step 1.



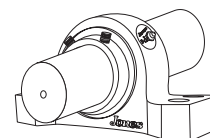
Check shaft diameter.* Remove any burrs on shaft with an emery cloth or fine file.

Step 2.

Make sure housing and support surface are clean and flat. Adjust elevations and shim if required.

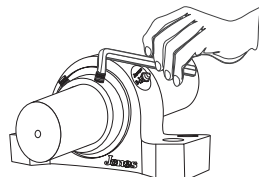


Step 3.



Position shaft into block and align to correct location. Bolt housing securely to mounting surface.

Step 4.



Tighten each of the set screws alternately with an Allen wrench until they stop turning and the wrench starts to spring. The spring in the wrench is more easily seen when using an extension.

Shaft Sizes In	Set Screw number size	Torque	Permissible Axial Load
		In-lbs	lbs
1 7/16 to 2 3/16	(2) 3/8" -24	250	515
2 7/16 to 3 1/2	(2) 3/8" -20	620	900
3 11/16 to 4	(2) 5/8" -18	1325	1200
4 7/16 to 4 15/16	(4) 5/8" - 18	1325	2400

****CAUTION:** Proper tightening of set screws is required to achieve adequate bearing service life and axial location avidity.

NON EXPANSION UNIT

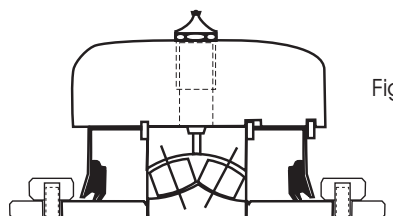


Fig. A

Fixed Unit

All bearings are shipped from factory as fixed units unless otherwise specified.

Step 5.

Jones Bearings are shipped from the factory as non expansion units. Most power transmission applications for mounted roller bearings do not require expansion units. However, in the event that expansion capability is required, all Jones 2000 Series mounted bearings can be easily converted to expansion units after installation by removing the backside snap ring. (see Fig. B)

EXPANSION UNIT

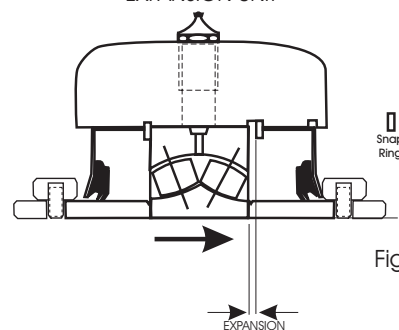


Fig. B

Expansion Unit

Remove Snap Ring "S" to make unit expansion type (when required).

* Recommended Shaft Tolerances

SHAFT SIZE (inches)	Tolerances (inches)
1/2 to 1 15/16	+.0000/- .0005
2 to 3 1/8	+.0000/- .0010
3 3/16 to 5	+.0000/- .0015

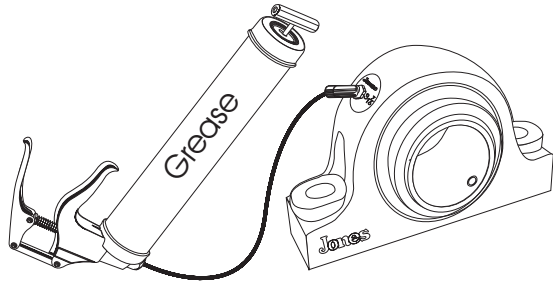
Bearing Bore Tolerances

SHAFT SIZE (inches)	Tolerances (inches)
1 1/8 to 1 7/16	+.0010/ - .0000
1 1/2 to 3	+.0010/ - .0000
3 3/16 to 3 15/16	+.0020/ - .0000
4 to 5	+.0020/ - .0000

Lubrication Guide



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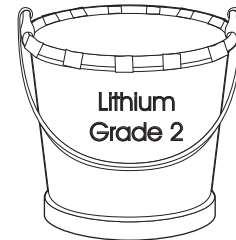


Method

All Jones Mounted Units are shipped pre-lubricated with enough grease for initial operation. Units are also supplied with a grease fitting for relubrication. It is recommended that bearings be lubricated while running. Caution should be used with high pressure grease guns or automatic lubrication equipment where high pressure could blow out or damage seals.

Type of Grease

All mounted units come with a lithium soap based grease, NLGI 2 consistency. In general, this type of grease is good for temperatures up to 200° F. This type of grease is very common and readily available from local suppliers. Consult Jones for high temperature or special application lubrication. Both frequency and quantity of lubrication are very important and can vary depending on speed or environment. Consult charts below for specific application information.



Speed	Temperature	Environment	Frequency
100 Rpm	- 125 F	Clean	4 Months
500 Rpm	- 150 F	Clean	2 Months
1000 Rpm	- 200 F	Clean	2 Weeks
1500 Rpm	+150 F	Clean	Weekly
All Speeds	- 150 F	Dusty	1 to 4 Weeks
All Speeds	+150 F	Dusty	Daily to Weekly
All Speeds	All	Very Dirty	Daily to Weekly
All Speeds	All	Hostile	Daily to Weekly

Lubrication Frequency Guidelines

The frequency of lubrication depends on the application and environment. This chart provides general guidelines for the lubrication rate of Jones bearings. Although it is generally an adequate guide for grease lubrication, these rates can vary depending on other circumstances like moisture or chemicals present, or with the type of grease selected for various applications.

Recommended Relubrication

The table at right gives the rate of relubrication for Jones mounted bearings as supplied with NLGI grade 2 grease and operating within the temperature range of -30° F to +200° F. Bearings should be relubricated while running for even distribution. Seals are designed to be grease purge able under low pressure application. Excess grease should be allowed to collect at the seal for extra protection against contaminants. Consult Jones for special seals or applications where excess moisture, corrosion, or extreme conditions exist.

Shaft Size (inches)	Grease Rate (ounces)
1 3/8 to 1 7/16	.22
1 1/2 to 1 11/16	.32
1 3/4 to 2	.50
2 to 2 3/16	.55
2 1/4 to 2 1/2	.65
2 11/16 to 3	.85
3 3/16 to 3 1/2	1.25
3 15/16 to 4	2.50
4 7/16 to 4 1/2	3.10
4 1/2 to 4 15/16	4.00