SYSTEM PLAST®

Mounted Bearing Supports
Notes and Installation Instructions

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FORM
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⚠ WARNING

- Read and follow all instructions carefully.
- Disconnect and lock-out power before installation and maintenance. Working on or near energized equipment can result in severe injury or death.
- Do not operate equipment without guards in place. Exposed equipment can result in severe injury or death.

⚠ CAUTION

- Periodic inspections should be performed. Failure to perform proper maintenance can result in premature product failure and personal injury.

Notes:

1. Additional bearing installation, relubrication and maintenance instructions can be found on our website: www.systemplastsmartguide.com.

2. The bearing is pre-lubricated with an H1 grade, synthetic base oil, complex calcium sulfonate soap thickener NLGI 2 grease. Re-greasing is not required during installation. When re-greasing, we recommend regreasing with a compatible grease. When feasible the bearing should be rotated while re-greasing for a better distribution of the grease.

3. Bearing assemblies are supplied with a lubrication fitting installed in the housing and may contain a plug supplied loose in the bag or box. If you want to make the bearing assembly non-regreasable, remove the lubrication fitting and install the plug. In general, re-greasing will help promote operating bearing life.

Installation Steps:

Step 1: Inspect Shaft and Bore

Shaft should be within tolerance range shown in Table 1, clean and free of nicks and burrs. Mount bearing on unused section of shafting or repair/replace shafting as required. Inspect both the shaft and bearing bore for debris or contaminants. Wipe clean as necessary.

Step 2: Check Support Surfaces

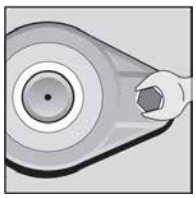
Make sure the base of the housing and the support surfaces are clean and free from burrs. If the housing elevation is adjusted with shims these must cover the entire contact area between the housing and the support surface.

Table 1

Shaft Diameter	Shaft Tolerance
12mm to 40mm	Nominal to -.013mm
1/2" to 1 1/2"	Nominal to -.0005"

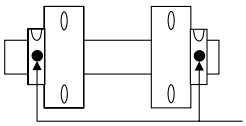
Step 3: Install Unit

To aid installation, keep weight off bearing during mounting. Slide unit onto shaft by pushing on the inner ring. If it is difficult to mount bearing on shaft, use a piece of emery cloth to reduce high spots on shaft.



Step 4: Fasten Unit in Place

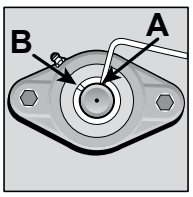
Install housing mounting bolts and check bearing alignment. Align the bearing units as closely as possible. Tighten mounting bolts to recommended fastener torques. Check the shaft for freedom of rotation by rotating shaft with hand in both directions.



Step 5: Tighten Locking Mechanism

a. Setscrew (Grub screw) Locking Inserts

Setscrews (Grub screws) in multiple bearing applications should be aligned as shown.



Tighten bearing units to the shaft as follows:

i. Torque first setscrew (grub screw) "A" to one half the recommended torque in table 2 or 3.

ii. Torque the second setscrew (grub screw) "B" to the full recommend torque in table 2 or 3. Go back to "A" and tighten to full recommend torque.

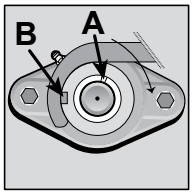
Table 2 / AISI 52100 Chrome Steel Setscrew (Grub Screw) Locking

Bore Diameter	Setscrew (Grub Screw)	Recommended Torque	
mm	**mm**	**Nm**	**in-lbs**
12, 15, 16, 17	M5x0.8	3.4	30
20, 25, 30	M6x1	5.6	50
35, 40	M8x1	11.3	100
inch	**inch**	**Nm**	**in-lbs**
3/4, 1, 1 3/16, 1 1/4R, 1 1/4	1/4"-28	5.6	50
1 7/16, 1 1/2	5/16"-24	11.3	100

Table 3 / 400 Series Stainless Setscrew (Grub Screw) Locking

Bore Diameter	Setscrew (Grub Screw)	Recommended Torque	
mm	**mm**	**Nm**	**in-lbs**
20, 25, 30	M6x0.75	5.6	50
35, 40	M8x1	11.3	100
inch	**inch**	**Nm**	**in-lbs**
3/4, 1, 1 3/16, 1 1/4R	1/4"-28	5.6	50
1 1/4, 1 7/16, 1 1/2	5/16"-24	11.3	100

b. Eccentric Locking Inserts



i. Place collar on inner race and rotate by hand in direction of shaft rotation until eccentrics are engaged.

ii. Use Spanner Wrench (as shown) or insert drift pin into the hole in the collar O.D. "B" and lock in direction of shaft rotation with the aid of small hammer.

iii. Torque single setscrew (grub screw) "A" to recommended torque in Table 4.

Table 4 / AISI 52100 Chrome Steel Eccentric Locking

Bore Diameter	Setscrew (Grub Screw)	Recommended Torque	
mm	**mm**	**Nm**	**in-lbs**
12, 15, 16, 17, 20, 25	M6x1	5.6	50
30, 35, 40	M8x1	11.3	100
inch	**inch**	**Nm**	**in-lbs**
3/4, 1	1/4"-28	5.6	50
1 3/16, 1 1/4, 1 7/16, 1 1/2	5/16"-24	11.3	100

Check shaft again for freedom of rotation and then tighten the second bearing unit in the same fashion. When all bearings are tightened, perform a final check to the shaft for freedom of rotation.

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