QD® Bushing Instructions

QD® BUSHING INSTRUCTIONS

Installation:

Note: Follow all instructions carefully to ensure satisfactory performance of both pulley and bushings. **For factory installed shafts, retighten the cap screws with a torque wrench set at the proper value shown in Table 1 (see page 2).**

Prior to installation, ensure the following components are free of grease and debris:

- Surface of shaft
- Bore of the bushing
- Tapered inside diameter of the QD hub
- Tapered outside diameter of the QD bushing

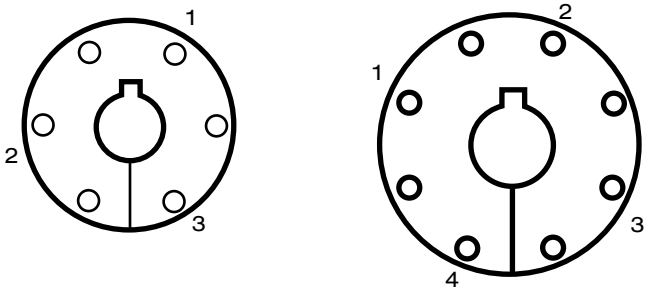
Particles left on the mating surfaces may cause improper installation.

Note: DO NOT LUBRICATE MATING SURFACE

1. If pulley is to be keyed to shaft, be certain both shaft and bushing keyways are clean, smooth, and free of burrs. Check key size with both shaft and bushing keyways. Place keys into the shaft keyways. Pulley bushing keyways require alignment of both of the shaft keyways for proper bushing to hub installation.
2. Place shaft into the pulley, being certain not to damage the bore of the hubs.
3. Insert a wedge in the bushing split and tap lightly to expand the bushing.

   CAUTION: EXCESSIVE EXPANSION WILL CAUSE THE BUSHING TO SPLIT.

   Slide bushings on to the shaft and into the hubs keeping the drilled holes of the bushings lined up with the threaded holes of the hub. Place the cap screws into the drilled holes of each bushing and hand-tighten cap screws into the threaded holes of the hubs. Remove the wedge.
4. Position the shaft as desired and tighten the cap screws in each bushing slightly so that the bushings are snug in the hubs.
5. Using a torque wrench and recommended torque (see Table 1) tighten cap screws alternately and evenly in one bushing only. Use the numbered sequence on the bushing flange cap screw heads in Figure 1, starting with 1 first, 2 second, and so on, with all cap screws being used until the specified torque no longer turns the cap screws. DO NOT OVERTIGHTEN. Over-tightening may damage the hub threads.



JA - JS BUSHINGS

MS - WS BUSHINGS

Figure 1

WARNING: DO NOT EXCEED RECOMMENDED TORQUE IN ATTEMPT TO PULL BUSHING FLANGE FLUSH WITH HUB FACE - THERE SHOULD BE CLEARANCE WHEN TIGHTENED.

If the bushing flange is pulled flush with hub face while tightening cap screws to recommended torque, check for an undersized shaft.

6. Tighten the second bushing following step #5.

HUB	NUMBER AND SIZE OF CAPSCREWS	WRENCH TORQUE (IN. LBS.)
JA	3 (10 – 24 NC x 1)	72
SH	3 (1/4 – 20 NC x 1–3/8)	108
SD	3 (1/4 – 20 NC x 1–7/8)	108
SDS	3 (1/4 – 20 NC x 1–3/8)	108
SK	3 (5/16 – 18 NC x 2)	180
SF	3 (3/8 – 16 NC x 2)	360
E	3 (1/2 – 13 NC x 2 –3/4)	720
F	3 (9/16 – 12 NC x 3 –5/8)	900
JS	3 (5/8 – 11 NC x 2 –1/2)	1620
MS	4 (3/4 – 10 NC x 3)	2700
NS	4 (7/8 – 9 NC x 3 –1/2)	3600
PS	4 (1 – 8 NC x 4 –1/2)	5400
WS	4 (1–1/8 – 7 NC x 5)	7200

TABLE 1

Maintenance: During the first 30 days of operation, inspect the bushings and cap screws for proper seating at least once a week and thereafter during periodic shutdowns.

Removal:

1. Remove all cap screws.
2. Insert cap screws into **all** threaded removal holes on bushings.
3. Tighten the cap screws **alternately and evenly** in one bushing only. A few turns on each of the jack screws should release the grip of the bushing. If the bushing does not loosen immediately, tap on the bushing with a rubber mallet.
4. Remove the bushing from the shaft.
5. Remove the second bushing following steps 1-4.

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