QD Bushing/Sheaves Installation

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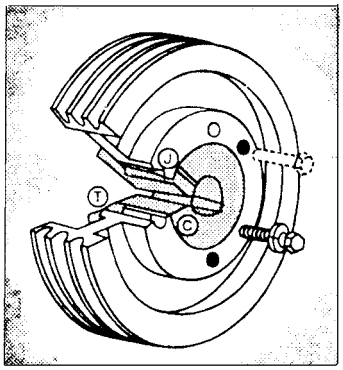
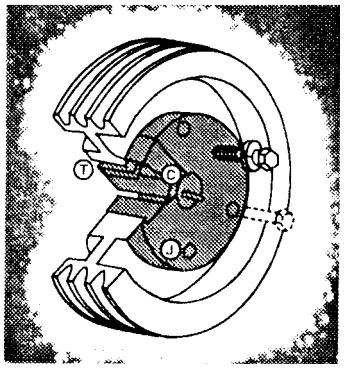
QD bushing sizes JA through N can be assembled in either of the two positions shown below. Sizes P through S should be assembled in position one. *Position One* is the conventional or standard mounting. *Position Two* (Reverse Mounting) may be necessary in some cases, such as mounting small sheaves with blind holes (not drilled through).



Position 1



Position 2

Bushing Size	Cap Screw Size-Thread	Foot Pounds Wrench Torque*
JA	10-24	3
SH-SDS-SD	1/4-20	6
SK	5/16-18	10
SF	3/8-16	20
E	1/2-13	40
F	9/16-12	50
J	5/8-11	90
M	3/4-10	150
N	7/8-9	200
P	1-8	300
W	1-1/8-7	400
S	1-1/4-7	500

*For Normal Applications. *For Severe* (Rock-crusher type) applications these values can be increased by a maximum of 50%

Caution: Excessive cap-screw torque can cause sheave and/or bushing breakage. The use of lubricants can cause sheave breakage.

Therefore,

DO NOT USE LUBRICANTS IN THIS INSTALLATION!

INSTALLATION:

1. Make sure the tapered-cone surface of the bushing and the mating bore of the sheave are free of all foreign substances, such as dirt, excess paint accumulations, metal chips, lubricants, etc.
2. For position one or two (whichever applies), line up the unthreaded holes (C) with the threaded holes (t) and insert cap screws with lock washers engaging only two or three threads. (*a)
3. With key in shaft keyway, slide the loosely-assembled unit onto shaft and position for good belt alignment. (*b, *c) **Use no lubricants or anti-seize compound on threads or tapered surfaces.**
4. Carefully tighten the capscrews alternately and progressively until the tapers are seated (at approximately half the recommended torque).
5. Check alignment and sheave runout (wobble) and correct as necessary.
6. Continue careful alternate and progressive tightening of the cap screws to the recommended torque values shown in the table. **Maximum torque should be achieved on each individual bolt only two times in the consecutive tightening.**

Note: When properly mounted, there will be a gap between the bushing flange and sheave after the screws are tightened.

Caution: Use of Lubricants and or excessive screw torque can cause breakage

7. Tighten the set screw, when available, to hold the key securely during installation and until cap screws are securely tightened.

REMOVAL

1. Loosen and remove all mounting cap screws.
2. Insert cap screws in all threaded jack screw holes (J).
3. Start with the screws furthest from the bushing saw slot and tighten all jack screws alternately and progressively. Keep turning the screws in small equal amounts until the tapered surfaces disengage.

(*a) When mounting a sheave on M through W size bushing, position the threaded jack-apart hole (J) as far from the bushing saw as possible to reduce the possibility of bushing breakage.

(*b) When installing large or heavy parts in *Position One*, it may be easier to mount the key and bushing on the shaft first. Then place the sheave on the bushing and align the holes.

(*c) **Caution**: When mounting on a vertical shaft, provisions must be made, which will positively prevent the sheave and/or bushing from dropping during installation.

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DOUBLE SPLIT TAPER BUSHINGS
INSTALLATION INSTRUCTIONS

INSTALLATION

1. Properly clean shaft, bore and taper surfaces of bushing. Remove and degrease any excess oil, paint or dirt, this includes the cap screws. Caution: Excessive cap screw torque can cause sheave or bushing breakage. The use of lubricants can cause sheave breakage. DO NOT USE LUBRICANTS OF ANY TYPE WITH THIS INSTALLATION.
2. Install the bushing into the hub and match the unthreaded bushing holes with the threaded holes of the hub. Install the cap screws and lock washers through the unthreaded holes and into the threaded holes of the hub. Engage only a few threads by hand – Do not use a wrench.
3. Install key into the keyway of the shaft and fit assembly onto the shaft and locate in the proper location.
4. Tighten cap screws alternately and gradually. Tighten cap screws to the recommended Wrench Torque Value using a torque wrench.

REMOVAL

Remove cap screws and insert into the tapped holes in the bushing.Tighten them alternately and gradually until the bushing disengages from the hub.

Recommended Wrench Torque		
Bushing #	lb-in	lb-ft
G	95	8
H	95	8
P1	192	16
P2	192	16
Q1	348	29
Q2	348	29
R1	348	29
R2	348	29

TB Bushing/Sheaves Installation

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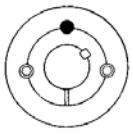
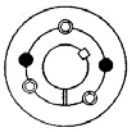
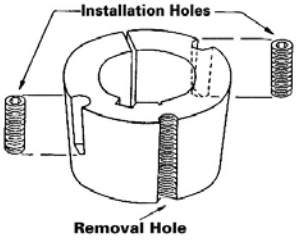
TB BUSHINGS INSTALLATION



1008 to 3030



3535 to 5050



INSTALLATION

1. Properly clean shaft, bore and taper surface of bushing. Remove or degrease any oil, paint or dirt.
2. Install the bushing into the pulley hub. Be sure to match the hole pattern, not the threaded holes. Match the half threaded holes with the half straight holes (a complete hole will be threaded on one side only.)
3. Lightly oil the set screws(1008 to 3030) or the cap screws (3525 to 5050) , be sure to oil under the cap screw head. Install the screws into the holes that are threaded on the hub side (shown as in diagram). DO NOT LUBRICATE THE BUSHING TAPER OR BORE. BREAKAGE OF PRODUCT MAY OCCUR.
4. Fit the pulley with the bushing onto the shaft and locate in the proper location. Install key into the keyway of the shaft and bushing.
5. Tighten screws alternately and gradually in accordance with the torques listed on the Recommended Wrench Torque chart.
6. Using a hammer with a block or sleeve (do not hit bushing directly with hammer) tap on large end of the bushing and re-tighten screws per the appropriate Wrench Torque Values.
7. Fill screw heads with grease to eliminate dirt build up.

REMOVAL

1. Remove all screws and lightly oil the point and threads. Oil under cap screws if used.
2. Install screws into the holes that are threaded only on the bushing side (shown as in diagram).
3. Tighten screws uniformly and alternately until the bushing is loose from in the hub and pulley is free from the shaft. Tap on small end of bushing to assist removal if it does not loosen. Note: One screw is not used for removal.

Recommended Wrench Torque			
Bushing #	Lb-In	Nm^2	Set Screw Hex Size
1008,1108	53	6	1/8”
1210, 1215	176	20	3/16”
1310	176	20	3/16”
1610, 1615	176	20	3/16”
2012	273	31	7/32”
2517-BSW	422	48	6mm
2525	422	48	1/4”
3020, 3030	790	90	5/16”
3535-BSW	986	112	10mm
4040	1,670	190	1/2”
4545	2,380	270	5/8”
5050	3,080	350	3/4”