Taper-Lock Bushing Installation and Removal

To Install TAPER-LOCK Type Bushings

1. Clean the shaft, bore of bushing, outside of bushing and the sprocket/sheave hub bore of all oil, paint and dirt. File away any burrs.

Note: The use of lubricants can cause hub fracture. DO NOT USE LUBRICANTS when installing tapered bushings.

- 2. Insert the bushing into the sprocket/sheave hub and align the holes. All of the holes should be half threaded. The installation holes will be threaded on the sprocket side, but not the bushing side. The removal holes will be threaded on the bushing side, but not the sprocket side. See Figure 1 below.
- 3. "LIGHTLY" oil the bolts and thread them into the half-threaded installation holes indicated by the white installation holes in Figure 1.

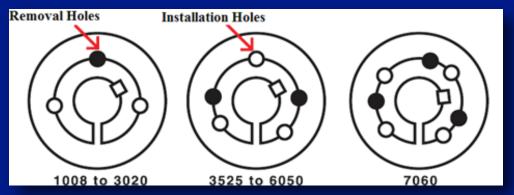


Figure 1 – Taper–Lock Bushing Installation Diagrams

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Note: Do not lubricate the bushing taper, hub taper, bushing bore, or the shaft. Doing so may result in sprocket/sheave hub fracture. DO NOT USE LUBRICANTS

4. With the key resting in the shaft keyway, position the sprocket/sheave and bushing assembly onto the shaft allowing for small axial movement of the sprocket/sheave which will occur during the tightening process.

Note: When mounting sprockets/sheaves on a vertical shaft, precautions must be taken to positively prevent the sprocket/sheave and/or bushing from falling during installation.

5. Alternately torque the bushing bolts until the sprocket/sheave and bushing tapers are completely seated together (use approx. half of the recommended bolt torque; see Table 1).

Note: Do not use worn hex key wrenches. Doing so may result in a loose assembly or may damage bolts.

- 6. Check the alignment and axial sprocket/sheave run out (wobble), and correct as necessary.
- 7 Continue alternate tightening of the bolts to the recommended torque values specified in Table 1 below.

Taper-Lock® Bushings

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Bushing	Bolts		Torque Wrench	
Style	Qty.	Size	lb-ft	lb-in
1008	2	1/4-20 x 1/2	4.6	55
1108	2	1/4-20 x 1/2	4.6	55
1210	2	3/8-16 x 5/8	14.6	175
1610	2	3/8-16 x 5/8	14.6	175
2012	2	7/16-14 x 7/8	23.3	280
2517	2	1/2-13 x 1	35.8	430
3020	2	5/8-11 x 1 1/4	66.7	800
3525	3	1/2-13 x 1 1/2	83.3	1000
4030	3	5/8-11 x 1 3/4	141.7	1700
4535	3	3/4-10 x 2	204.2	2450
5040	3	7/8-9 x 2 1/4	258.3	3100
6050	3	1 1/4-7 x 3 1/2	651.7	7820
7060	4	1 1/4-7 x 3 1/2	651.7	7820

Caution: Excessive bolt torque can cause sprocket/sheave and/or bushing breakage.

Note: To insure proper drive performance, full bushing contact on the shaft is recommended.

Table 1 – Taper–Lock Bushing Bolt Torque Values

- 8. To increase the bushing gripping force, firmly tap the face of the bushing using a brass drift or punch (Do not hit the bushing directly with the hammer).
- 9. Re-torque the bushing bolts after Step 8. After reaching the recommended bolt torque value once, stop. Continued tightening to the recommended torque level will over insert the bushing.
- 10. Recheck all bolt torque values after the initial drive run-in, and periodically thereafter. Repeat steps 5 through 9 if loose.

To Remove TAPER-LOCK® Type Bushings

- 1. Loosen and remove all mounting bolts.
- 2. Insert bolts into all jack screw holes indicated by dark removal holes in Figure 1 on page 1.
- 3. Loosen the bushing by alternately tightening the bolts in small but equal increments until the tapered sprocket/sheave and bushing surfaces disengage.

