



SUPERBOLT®

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Mill Motor Tensioner “SMX Series” Application Guide

This guide covers installation and removal of Superbolt® mill motor tensioners which are designed to replace conventional mill motor nuts. Common fastening applications include brake wheels, couplings, pinions, and pulleys. These procedures are intended for use in conjunction with the Mill Motor Manufacturer’s Installation Guide. This guide does not supersede any requirements of the motor manufacturer.

INSTALLATION:

1. Superbolt® Mill Motor Tensioners require standard hand-held torque-wrenches and allen keys for proper installation. See chart on the back side of this guide for the appropriate allen size and rated jackbolt torque.

2. Slide the Superbolt® hardened washer onto the shaft.

3. Check the jackbolts in the Mill Motor Tensioner - the bottoms of the jackbolts should be flush with the bottom of the tensioner body.

4. Thread the Superbolt® Mill Motor Tensioner onto the shaft, by hand, until it contacts the hardened washer. Note: hand tight is sufficient.

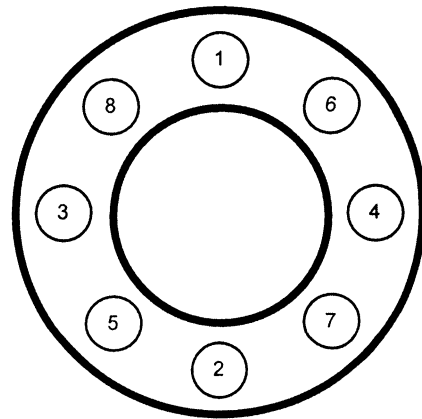
5. Determine the rated torque value for the jackbolts. The rated torque value is stamped on the Mill Motor Tensioner body and is also listed on the back side of this guide.

6. Start by snugging the jackbolts to 10% of the rated value from step 5. This seats the main thread and eliminates clearances. The star pattern shown in the diagram should be used for this initial tightening sequence.

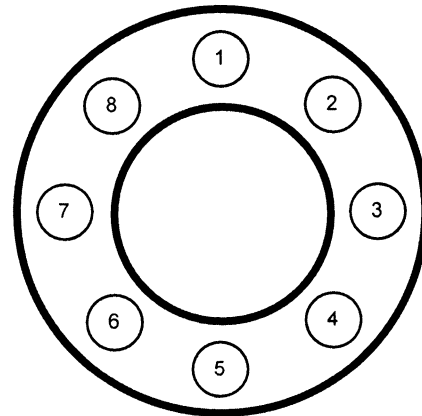
7. Tighten the jackbolts in the same pattern to 50% of the rated jackbolt torque value.

8. Change to a circular pattern and torque the jackbolts to 75% of the rated jackbolt value.

9. Finally, adjust torque wrench to 100% of the rated jackbolt value and continue to repeat the circular pattern until all jackbolts are torqued to the same value. Do not exceed the torque value stamped on the tensioner without specific approval from Superbolt®.



Star Pattern for Initial Tightening Only

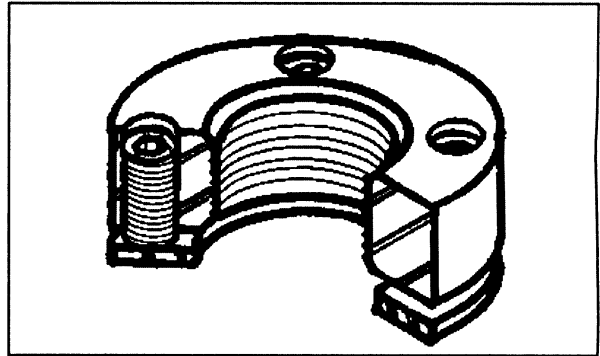


Circular Pattern for Later Tightening and All Loosening

See reverse side for removal and torque settings

Superbolt Mill Motor Nut Removal Procedure

1. Turn the first jackbolt counter-clockwise until it feels loose (no more than one quarter turn). The idea is just to unload each jackbolt, not completely loosen it.
2. Move in a circular pattern to the next jackbolt and repeat step 1.
3. Continue repeating in a circular pattern until all jackbolts have been unloaded. Usually, after 2 or 3 passes, the nut can be spun off the motor shaft by hand.
4. Usually there is no need to remove the jackbolts from the tensioner body. However, the jackbolts should be removed periodically between installations and relubricated with Superbolt approved lubricant to insure proper jackbolt torque vs. preload performance on reinstallation. Note: "SMX series" Mill Motor Tensioners are assembled with Molybdenum Disulfide jackbolt lubricant (JL-M).



Note: Do not exceed the torque value stamped on the tensioner without specific approval from Superbolt. Contact us at (412) 279-1149 with any questions on these procedures.

Superbolt Standard Mill Motor Nuts

Part Number	Thread Diameter (in)	TPI	Set Screw Diameter (in)	Allen or Hex Bit Size (in)	Standard Preload (lbs)	Setscrew Torque (ft-lbs)
SMX-802 /w	1.000	8	3/8	3/16	22,000	12
SMX-803 /w	1.250	8	3/8	3/16	33,000	12
SMX-804 /w	1.250	8	3/8	3/16	33,000	12
SMX-806 /w	1.500	8	1/2	1/4	37,000	26
SMX-808 /w	2.000	8	1/2	1/4	56,000	26
SMX-810 /w	2.250	8	5/8	5/16	66,000	58
SMX-812 /w	2.500	8	5/8	5/16	99,000	58
SMX-814 /w	3.000	8	5/8	5/16	132,000	58
SMX-816 /w	3.250	8	5/8	5/16	132,000	58
SMX-818 /w	3.500	8	5/8	5/16	132,000	58
SMX-820 /w	4.000	8	5/8	5/16	198,000	58
SMX-824 /w	4.000	8	5/8	5/16	198,000	58

Other Standard Sizes

SMX-050-20/w	0.500	20	5/16	5/32	7,500	3.5
SMX-062-18/w	0.625	18	5/16	5/32	9,000	4.2
SMX-075-10/w	0.750	10	3/8	3/16	11,000	6.0
SMX-075-14/w	0.750	14	3/8	3/16	11,000	6.0
SMX-087-12/w	0.875	12	3/8	3/16	14,500	8
SMX-100-12/w	1.000	12	3/8	3/16	24,000	13
SMX-100-14/w	1.000	14	3/8	3/16	24,000	13
SMX-125-12/w	1.250	12	3/8	3/16	33,000	12
SMX-175-8/w	1.750	8	1/2	1/4	56,000	26
SMX-175-12/w	1.750	12	1/2	1/4	56,000	26
SMX-200-12/w	2.000	8	1/2	1/4	56,000	26
SMX-275-8/w	2.750	8	5/8	5/16	92,000	40
SMX-300-8/w	3.000	8	5/8	5/16	132,000	58
SMX-300-4/w	3.000	4	5/8	5/16	132,000	58