

8/1/07



**SUPERBOLT**

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**General Tensioner  
 Installation Sheet**

The following information is specific for Multi-Jackbolt Tensioners with catalog part number .....

S-02200

  
 Catalog Part Number

There should be a sheet like this for each part number shipped.

**Lubrication:** The jackbolts of every Tensioner have been lubricated at the factory. Lubrication of the main bolt or stud thread is recommended, but not necessary for the proper function of the SUPERBOLT Tensioner.

**Hardened Washer:** Every Tensioner is shipped with a special hardened washer to prevent the hardened jackbolts from penetrating and damaging the part to be clamped.

**Tools:** A torque wrench (preferably the "click" type) and socket are the only tools required. Air or electric power wrenches may be used for runup, but a torque wrench is necessary for final tightening.

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 Socket Size

The socket required for this catalog part number is a .....  
 High strength sockets can be obtained from SUPERBOLT, Inc.

**Determining Preload and Jackbolt Torque Requirements:**

The standard main bolt/stud preload for this part number is .....  
 and the jackbolt torque which will produce that preload is .....

75,000

 lbs.      Standard Preload  
33 ft•lbs      Standard J-B Torque

If you require other than this standard preload, calculate your jackbolt torque requirement with this formula:

$$\text{Required Jackbolt Torque} = \frac{\text{Required Preload} \times \text{Standard J-B Torque}}{\text{Standard Preload}} = \frac{\quad \times \quad 33}{75,000} = \quad$$

The standard preload is not the maximum in some cases. Higher preloads may be available, depending on temperature range and bolting application (i.e. permanent vs. periodic removals). Please contact the SUPERBOLT factory office for further details on increased preloads or if you have any questions about this sheet.

The required Jackbolt Torque is \_\_\_\_\_ ft•lbs

If your order specified a particular preload value, it has been inserted in the formula above and the first row of this table.

If you supplied Other Required Values data, the first row of this table shows all corresponding values.

If not, this table is intended to establish a range of values for each of these factors. The second row lists the standard catalog values. You may find your required value in one of the columns. If so, read across to find the corresponding values. If your value is not in the table, you can determine intermediate values using a simple ratio formula like the samples below:

$$\text{Req'd JB Torque} = \frac{\text{Known Hex Nut Torque} \times \text{Std. JB Torque (ln2)}}{\text{Std. Hex Nut Torque (line 2)}}$$

$$\text{Req'd Preload} = \frac{\text{Known Stress} \times \text{Std. Preload (line2)}}{\text{Std. Stress (line2)}}$$

Preload (lbs.)	Jackbolt Torque (ft•lbs.)	Bolt Stress (psi)	Equivalent Hex Nut Torque (oil lube)
	0	0	0
75,000	33	71,160	1,520
73,780	32	70,000	1,490
63,240	28	60,000	1,280
52,700	23	50,000	1,070
42,160	19	40,000	850
31,620	14	30,000	640