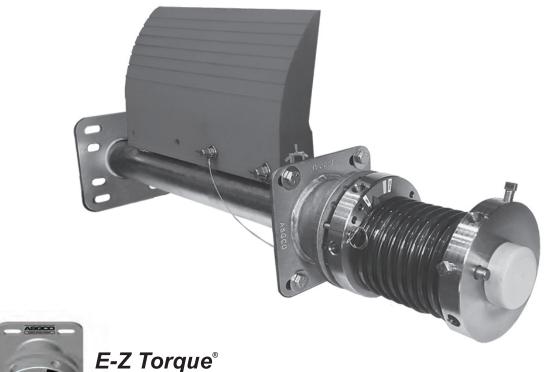


## **SUPER-SKALPER® HD**

with E-Z Torque® Tensioner

# INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS





U.S. Patent No. 5,992,614

U.S. Patent No. 5,992,614 Other Patents Pending



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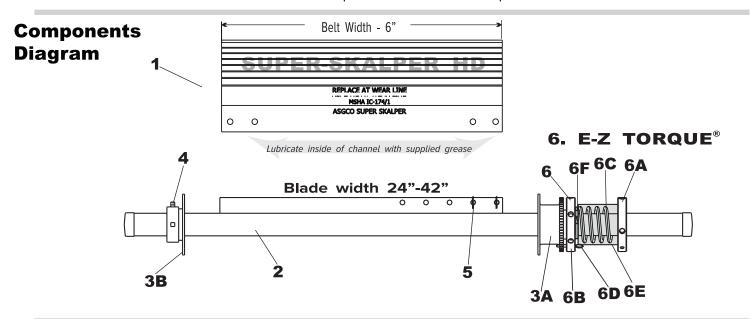
#### Important Safety Notice

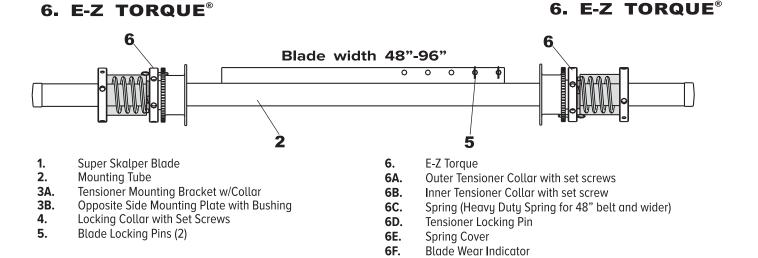
Always observe the basic rules of safety when working with any conveyor system. To avoid injury and equipment damage, be sure that all controls to the conveyor are locked out and the power source is disconnected at all times during installation.



#### **Overall View**

If mounting structure is not available, additional steel may have to be added. Note: Excess mounting tube may be trimmed after installation. Also note required lubrication of components.





## 1. Determine the Critical "N" Dimension

Determining the "N" dimension, the distance from the belt surface to the mounting tube center, is critical to get the maximum cleaning performance from your system. Make sure mounting tube and tensioner system are clear of obstacles.

"N" Dimension Table		
Note the tolerance is ± ¼" [6mm]		
18" [450mm]	7-3/8" [187mm]	
20" [500mm]	7-1/16" [179mm]	
24" [600mm]	6-9/16" [167mm]	
30" [750mm]	5-15/16" [151mm]	
36" [900mm]	5-7/16" [138mm]	
42" [1050mm]	5-1/16" [129mm]	
48" + [1200mm]	4-3/4" [121mm]	

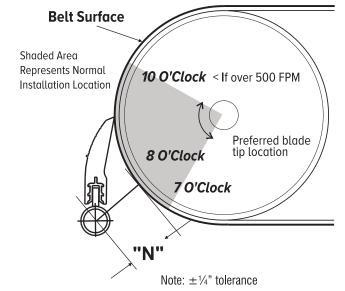
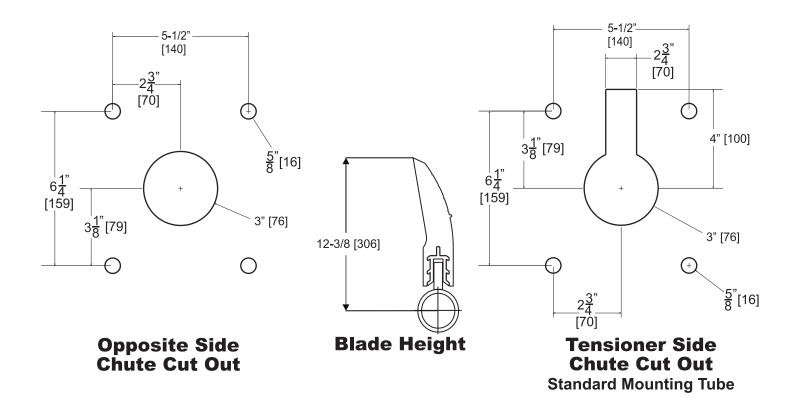


Figure 1: Typical Mounting Position

## 2. Cut Chute Openings

Determine the desired location of the mounting brackets. The required slot sizes/locations are shown for the tensioner side chute cut outs.



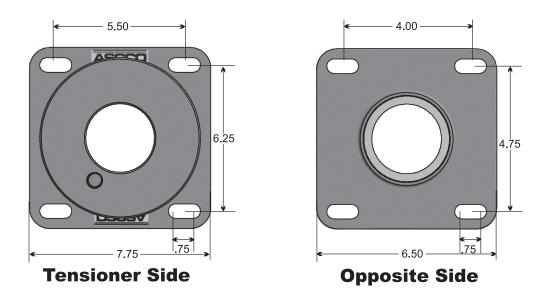
## through Cut Outs

**3. Put Mounting Tube** Place the mounting tube through the chute cut outs so that the long tube section is on the tensioner side. Place the blade onto the blade holder. Visually check the blade position and contact with the belt/pulley.

#### 4. Mount Brackets

Determine the desired location of the mounting brackets. Attach the mounting brackets to the conveyor frame by welding or bolting.

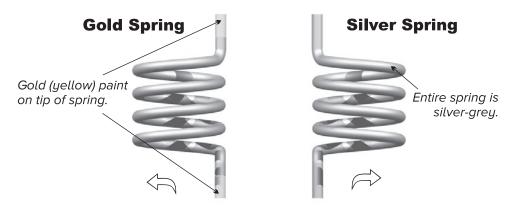
(NOTE: If the welding method is chosen to mount the brackets, allow sufficient time for the brackets to cool down before inserting UHMW Bushing's into the brackets, this is to avoid damaging the bushing.)



#### 5. Select Correct Spring

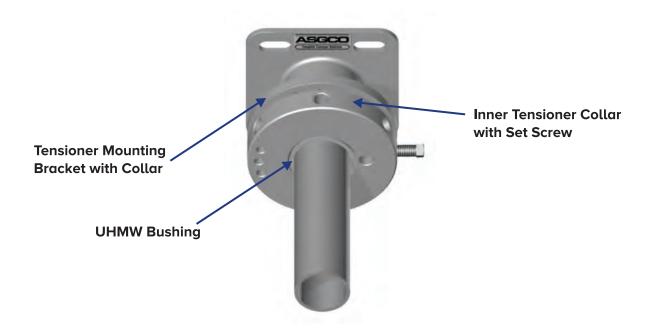
Each Super-Skalper System is shipped with two springs of opposite handedness. To determine the proper spring to use:

Face the head pulley as the material would come to you. If the E-Z Torque tensioner is on the right side, then use the Silver Spring (entire spring is silver-grey). If the tensioner is to your left, then use the Gold Spring (yellow tipped spring).



## 6. Assemble E-Z

Assemble the components of the E-Z Torque tensioner. **Torque® Tensioner:** Tighten all set screws to 70 ft./lbs.



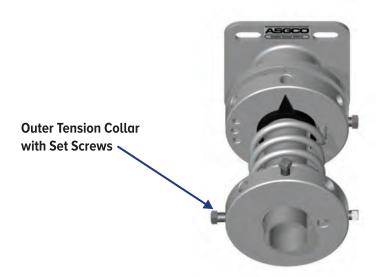
Slide UHMW bushing onto the tensioner mounting bracket. Then slide the inner tensioner collar onto the UHMW bushing.



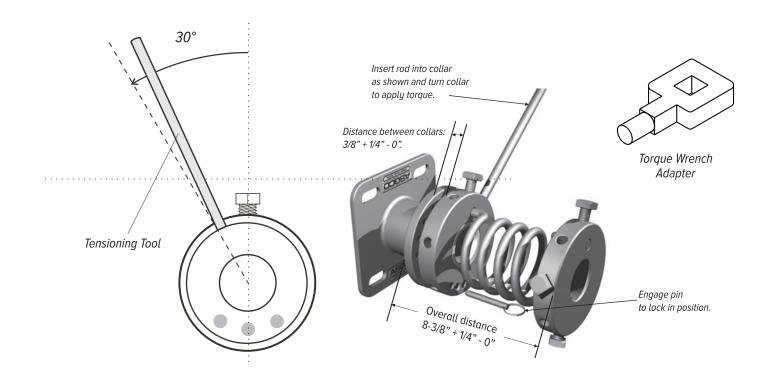
Slide ring onto the mounting tube, flush with the UHMW bushing. Do not tighten the set screws on the ring in this step.



Insert one end of the spring into the Inner Tension Collar. The end of the spring should be seated all the way through the collar. Ring should be able to move freely though out installation. Do not tighten set screw until both collars are in place.



Slide the Outer Tension Collar onto the pipe and spring. With both collars in place, tighten the set screws on both ends of the spring and the set screws on the mounting tube. Assemble the components of the E-Z Torque® tensioner. Tighten all set screws to 70 ft./lbs.



#### Blade Width 24" - 42" Single Tensioner

Set tension to about 1-1/2 ft/lb torque per inch of blade width. (See chart below) 1 degree

Blade Width	Torque Ft-Lb	Spring Rotation Degrees
24	36	18
30	45	22
36	54	27
42	63	31

#### Blade Width 48" - 96" Dual Tensioner

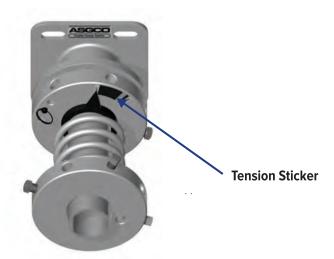
Blade width 48" and above, dual tensioners are supplied. Recommended tension <u>per</u> tensioner. (see chart below)

Blade Width	Torque Ft-Lb	Spring Rotation Degrees
48	36	18
54	40	20
60	45	22
72	54	37
84	63	31
96	72	36

Use direct torque/reading if using a torque wrench.

Decrease or increase as necessary. The minimum amount of blade force required to clean the belt will extend blade life. The tensioning rod may be used to get approximate blade tension. Use the torque wrench adapter to accurately tension the blade.

## 7. Set Wear Indicator:



With the system tensioned, place the blade wear sticker on the Inner Tension Collar. It is recommended to align the sticker 90 degrees from the pin and spring hole on the collar, to ensure the indicator can travel the full distance required to measure blade life. Position the ring at the 100% line on the blade wear sticker and tighten the set screws on the ring.

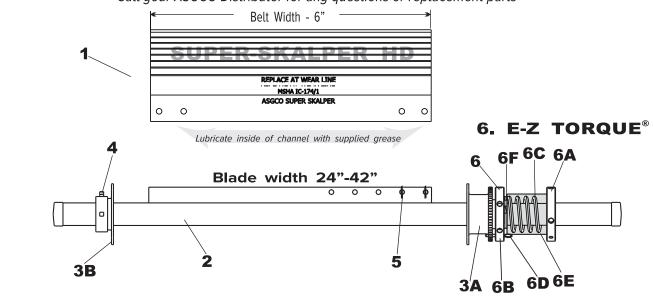
#### **Maintenance**

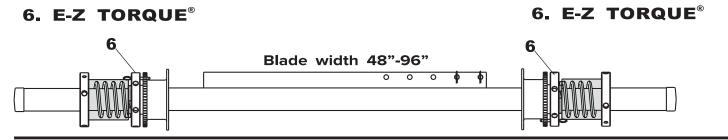
- 1.) Frequent inspections the key to proper belt cleaning and easy scraper servicing. Weekly inspections are recommended, but actual service frequency may vary widely depending on various plant operating conditions.
- 2.) Inspect the belt surfaces and edges for cracks, splits, tears, holes or any other worn or damaged condition occurring on the surfaces or edges of the belt itself. If necessary make repairs to the belt. Wash the entire cleaner regularly to prevent excessive build-up. Check the tightness of all fasteners.
- 3.) Inspect for proper operation. Adjust tension as required.
- **4.)** Replace the Super-Skalper® scraper blade as required. Use only ASGCO® Manufacturing approved replacement scraper blades.

#### **Information**

Key	Description	Part Number
1	Super-Skalper <sup>®</sup> Blade Replacement	ASG-SSK[X]-[BW]-A-1 [X]=Blade Type, [BW]=Blade Width
2	Super-Skalper® Mounting Tube	ASG-SSKMT-XXA-HDOP
3A	Mounting Bracket Tension Side	ASG-EZT-TS-ASM-2-MDX (Includes Bushing)
3B	Mounting Bracket Opposite Side	ASG-F1-MB-OS-2-MDX
	Bushing (Off-Side)	ASG-F1-UHMW-BUSHING-1-MDX
4	Locking Collar with Set Screws	ASG-F1-LC-1-MDX
5	Locking Pins (2)	M-ASG-SKMT-CL
6	E-Z Torque <sup>®</sup>	M-ASG-EZT-A-HD
	Bushing (Tension Side)	ASG-UHMW-BUSHING-1-MDX
6A	Outside Collar	ASG-EZT-OCHS-SS-2-MDX
6B	Inside Collar	ASG-EZT-ILS-SS-2-MDX
6C	Spring	ASG-ROT-[LS or RS]-4896-SS-1-MDX
6D	Locking Pin (Tensioner)	ASG-ROT-LPC-HDOP-G8
	Rotary Tensioning Tool	ASG-ROT-TT-SS
6E	Spring Cover	ASG-EZT-SPRING-COVER-MDX
6F	Blade Wear Indicator Ring	ASG-EZT-IND-RING-MDX

Call your ASGCO Distributor for any questions or replacement parts





#### **TROUBLE SHOOTING**

PROBLEM	SOLUTION
Excess vibration of the scraper.	Make certain all bolts are tight and the pin is securely engaged on the tensioner.
	Ensure the cleaners n-dimension is proper (See Table and Figure 1).
Excess carryback.	Check for excess build-up on the scraper.
	Check for proper Scraper tension. Put additional tension on cleaner.
	Check for non-uniform scraper wear.
	Check N-dimension.
	Clean the back-side of the belt cleaner.
Check for wear on the cleaning tips.	Check thickness of carry-back. If the cleaner must remove more than about 1/8" of material then an additional cleaner may be needed.
Frozen material on scraper.	Place heaters near scraper to melt frozen material. (Use caution not to burn belt or cleaner)
Blade wearing in center	Install a new blade that concentrates cleaning in the center of the flow of the material. (Belt Width - 12")
Blade wearing more on one side	Check N-dimension.
Breaking Tensioner Pin	Consider the type of splice in the belt. If there is a mechanical fasteners splice, make sure the belt top cover is skived to allow the cleaner to pass over the splice.