

Installation Guide



SUPER-G™

Conveyor Belt Cleaning System



⚠ WARNING

Always obey all applicable safety rules.

Be sure all power to the conveyor has been disconnected and controls are locked out.

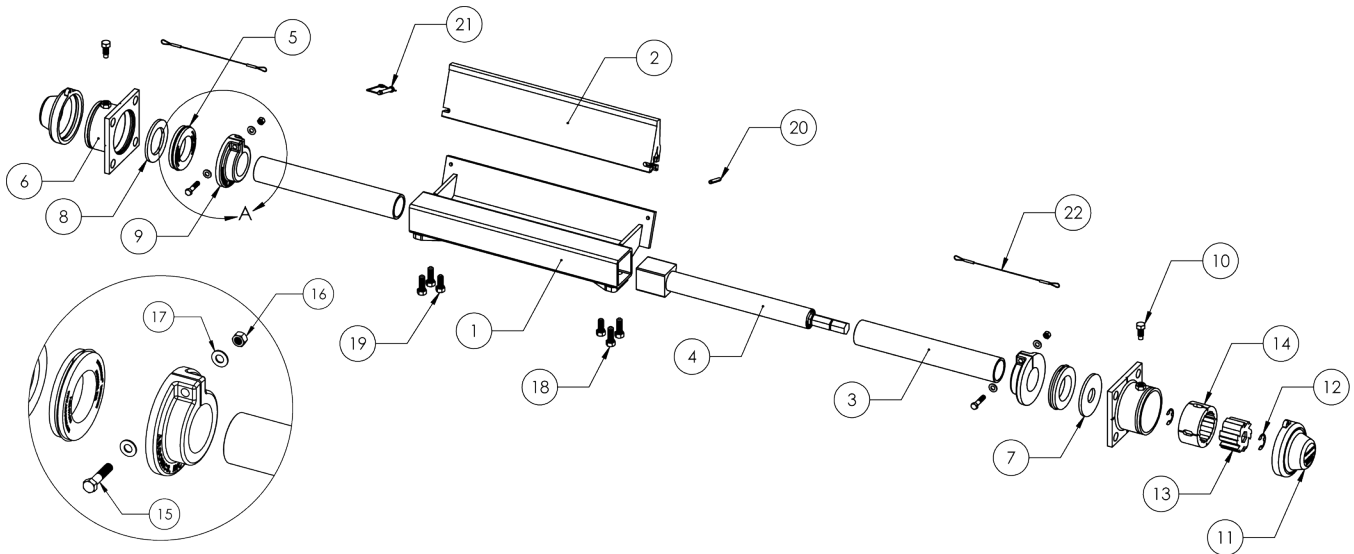
Installation Tools Required

- Tape measure
- Cutting Torch or Hole Saw (3 1/2")
- Level
- Scribe or Chalk

- Welder or Drill
- 1/2" End Wrench
- 3/4" End Wrench
- 1" End Wrench or Crescent Wrench

Bolts, lock washers and nuts for mounting are not supplied

Safe Torque Ratchet System - Assembly Breakdown



Number	Part Number	Quantity	Description
1	CP-SG-"XX"A	1	Mainframe
2	CP-SG-"XX"-G83	1	Raptor Blade
3	CP-AR-12B or CP-AR-22B	2	Stub End
4*	CP-AR-1-1375-E-B93 or CP-AR-1-2075-E-B93	1	1" Perma-Torque Tensioner
5	CP-AR-23-RT-B93	1	1" Extended Perma-Torque Tensioner
6	CP-AR-30R	2	Standard Inner Snap Seal
7*	CP-AR-41F	2	Standard Ratchet Mounting Spool
8	CP-AR-41F-ST	1	Standard Ratchet Spool Washer
9	CP-AR-LC5-G83	1	Std. Rat. Spool Washer - Single Tensioner
10	CP-AR-512540	2	Standard Locking Collar
11	CP-AR-52B-Y83	2	Bolt, 0.5"-13 NC, Zinc-Plated 1.25" Long
12*	CP-AR-98407A156	2	Standard Dust Cap
13*	CP-AR-22C-G83	2	Retaining Ring
14*	CP-AR-32C-G83	1	Standard Inner Ratchet Catch
15	BOLT-0.38X1.75NC-ZC	1	Standard Outer Ratchet Catch
16	NUT-016	2	Bolt, 0.375"-16 NC, Zinc-Plated 1.75" Long
17	WASH-0.38-F-SAE-ZINC	2	Nut, 0.375"-16 NC, Zinc-Plated
18	CP-AR-5150S	4	Washer, Sae .375", Zinc-Plated
19	CP-AR-5125S	4	Stainless Hex Set Screw, 0.5" x 1.5"
20	CP-AR-303	2	Stainless Hex Set Screw, 0.5" x 1.25"
21	CP-AR-275	1	Spring Pin 0.5"-Unc X .75" Lg Zinc
22	CP-AR-90312A720	1	Safety Snap Pin .375"X2.25"
		2	Wire Rope Lanyard; 12" Long, 3/64" Wire

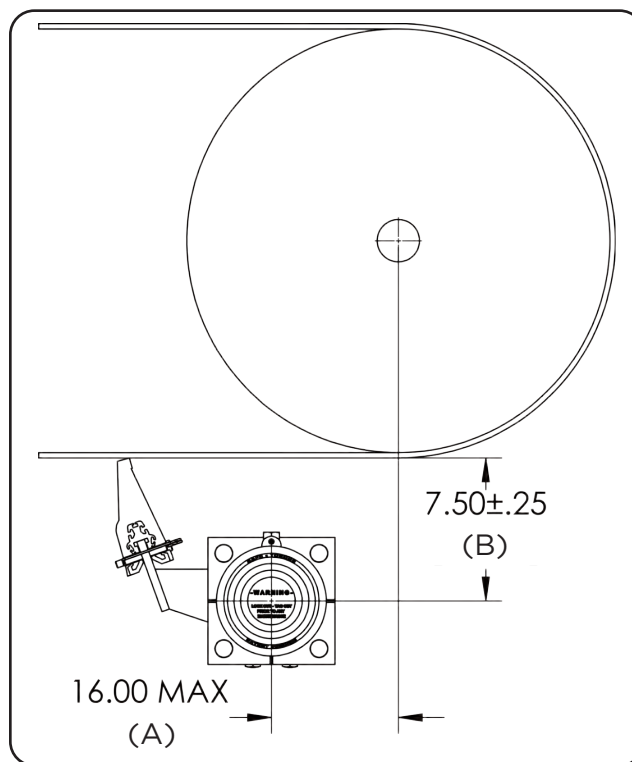
* Systems 36" and above come standard with dual tensioners and require double of each of the noted parts.

Note:

This Super-G Secondary belt cleaning system is designed to be used on conveyor pulleys of 14" in diameter and larger.

Step One: Calculations

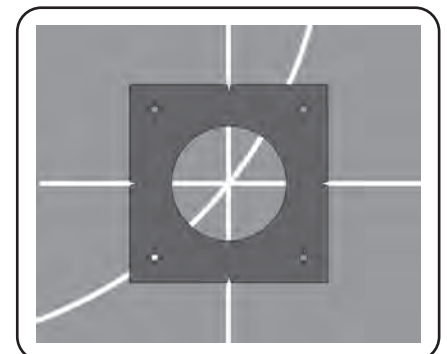
Place a level across the width of the belt where the belt leaves the head pulley (L1) and make a mark on each side of the mounting structure wall. Repeat this process within the 16" maximum mounting area (A) shown in the illustration below. This will be your L2 mark. Now measure perpendicular to the belt $7\frac{1}{2}"$ (B) down from your marks and scribe a line between these two points. ***This line should be parallel with the belt and $7\frac{1}{2}" \pm \frac{1}{4}"$ down.*** The Super-G system can be mounted anywhere along this line. Make sure that both sides of the mounting structure wall are marked exactly the same. If no structure is available at this location, a mounting structure will need to be added. The ideal location is directly below and perpendicular to the pulley shafts center (see illustration).



You are only allowed to deviate $\frac{1}{4}"$ on the "B" dimension.

Step Two: Layout

After you have determined the mounting location for your belt cleaning system, align the template (see page 11 of this guide) with your bisected horizontal and vertical lines on the mounting structure wall and transfer the center hole, bolt holes and perimeter of the template to the chute wall using your scribe.



Repeat the layout procedure on the opposite mounting structure.

For single tensioner, follow instructions on page 4. For dual tensioner, turn to page 6.

INSTALLATION - Single Tensioner

Step Three (A): Mounting systems equipped with a single tensioner

Cut the tensioner hole which was scribed on the mounting structure (your finished hole should be approx. $3\frac{1}{2}$ " in diameter).

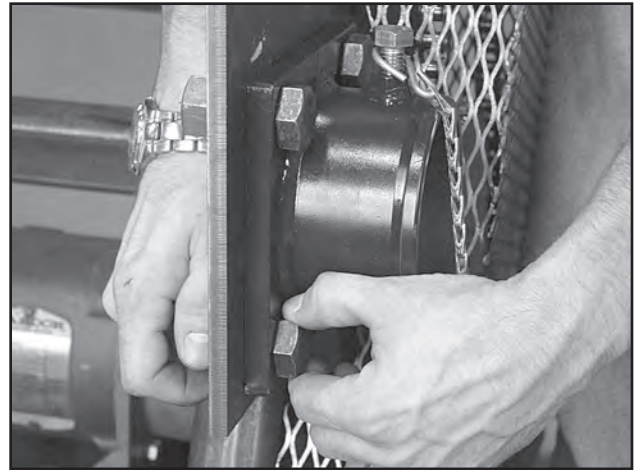
NOTES:

- For Bolt In Only - Using the bolt circles that you scribed as a guide, drill four $\frac{13}{16}$ " diameter holes to accept $\frac{1}{2}$ " or $\frac{3}{4}$ " diameter grade 8 bolts.

Single tensioner Super-G systems are shipped with the tensioner on the left side, facing the head pulley. If you need to mount your tensioner on the right side please refer to tensioner assembly instructions on page 9.



Remove the urethane locking collars from the stub ends.



Remove the mounting spool from the non-tensioner side of the system. Line up the spool with the holes in the chute wall, then bolt it into place using four $\frac{1}{2}$ " or $\frac{3}{4}$ " grade 8 bolts and lock washers. You can also choose to stitch weld on the flat sides of the mounting spool.

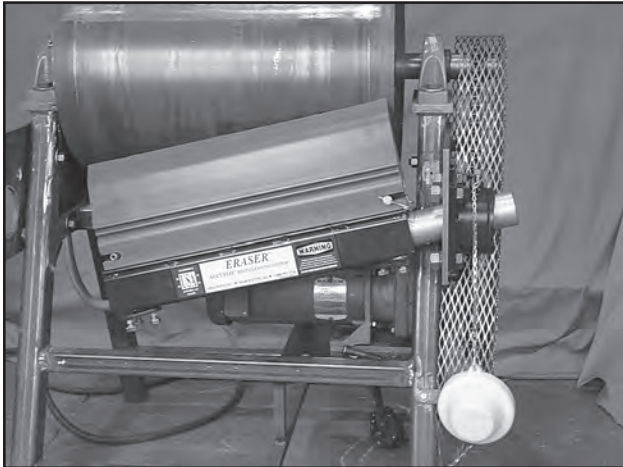


Using a $\frac{1}{2}$ " end wrench, loosen the three setscrews located on the bottom of each end of the mainframe. Remove the entire tension cartridge from the left side of the mainframe.

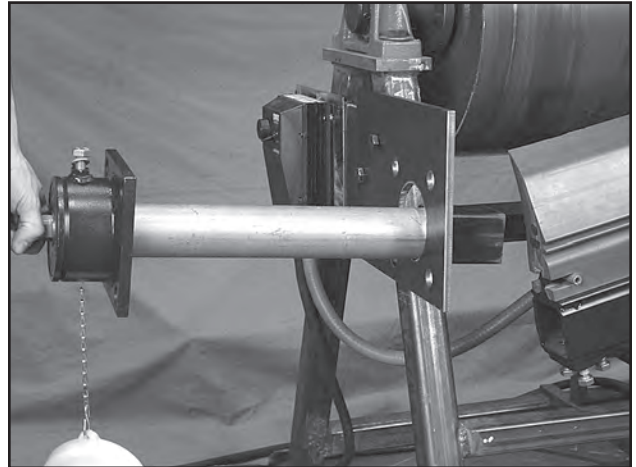


Lift the mainframe into position. Insert the stub end into the mounting spool on the non-tensioner side.

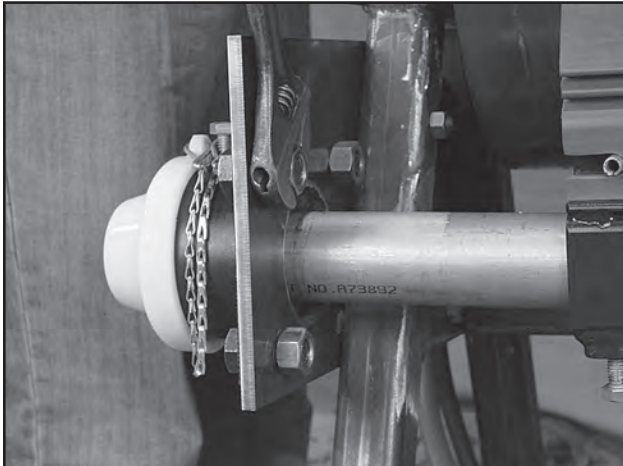
INSTALLATION - Single Tensioner



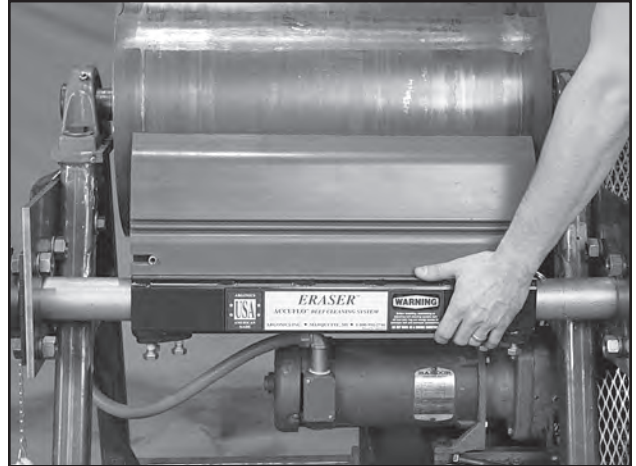
Temporarily retighten the three setscrews to hold the mainframe in place. Then carefully lower to let system hang in place.



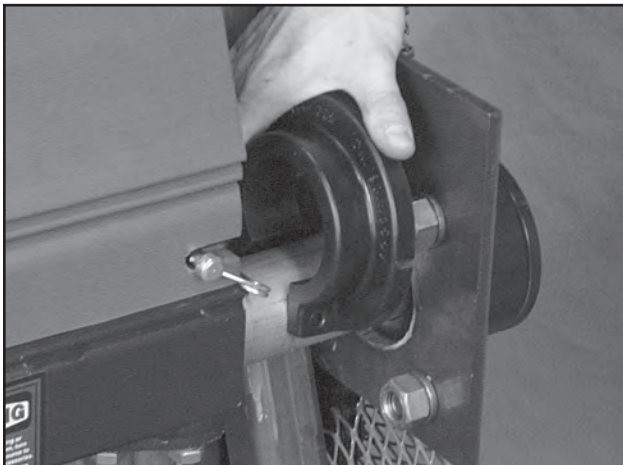
On the other side of the chute, slide the tensioner cartridge through the chute wall and insert it into the mainframe.



Temporarily retighten the setscrew on tensioner side to stabilize system. Bolt or stitch weld the mounting spool on the tensioner cartridge to the chute wall.



Loosen the setscrews and center the mainframe and blade to the belt. Tighten the setscrews to secure the stub ends.



Install the urethane locking collars by sliding them over the stub end, snugging them to the chute wall. Tighten the bolts to secure.

IMPORTANT

At the top point of the mounting spool, the inner ratchet catch must always point away from the load pulley.

**PROCEED TO
TENSIONING INSTRUCTIONS
ON PAGE 8**

INSTALLATION - Dual Tensioner

Step Three (B): Mounting systems equipped with a dual tensioner

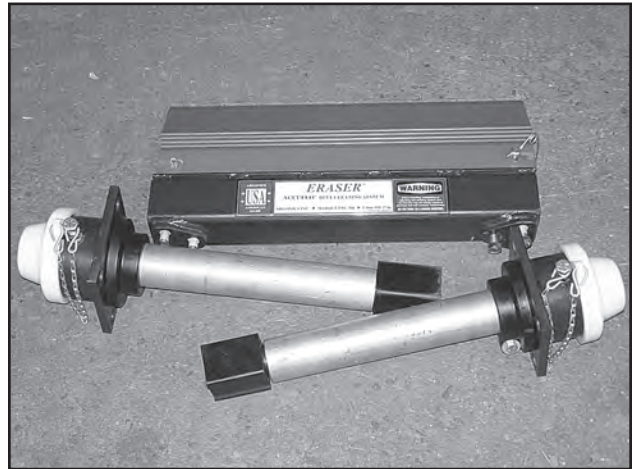
Cut the tensioner holes which were scribed on the mounting structure (your finished holes should be approx. 3 1/2" in diameter).

NOTES:

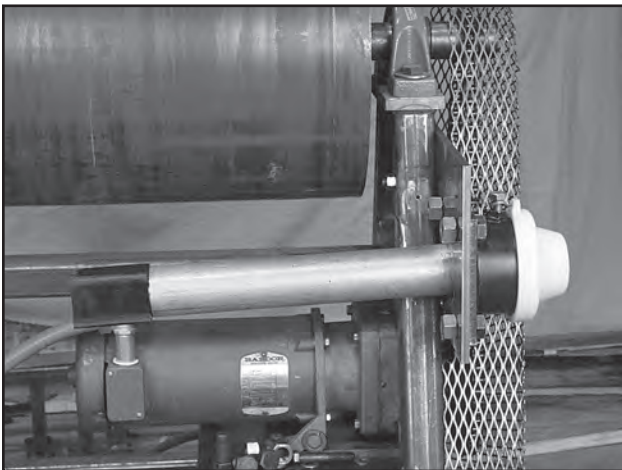
- For Bolt In Only - Using the bolt circles that you scribed as a guide, drill four 13/16" diameter holes to accept 1/2" or 3/4" diameter grade 8 bolts per mounting spool.



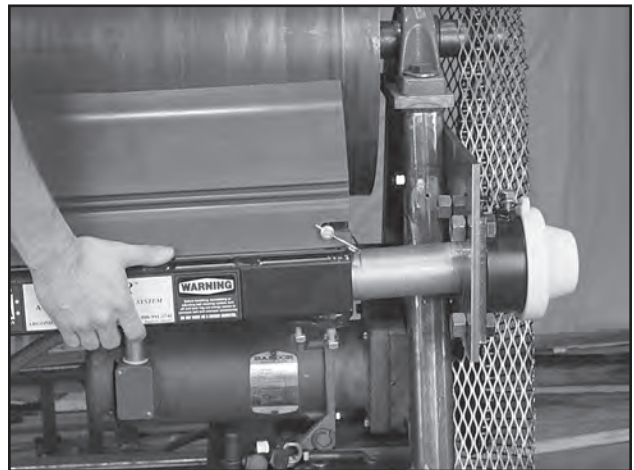
Remove the urethane locking collars from the stub ends.



Remove both tension cartridges from the mainframe.

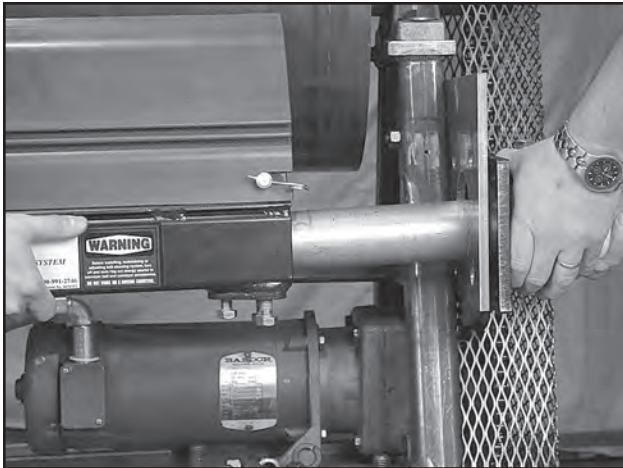


If there is room, slide the first tensioner cartridge through the chute wall and line up the mounting spool with the template that was transferred to the chute wall. Now bolt or weld into place.

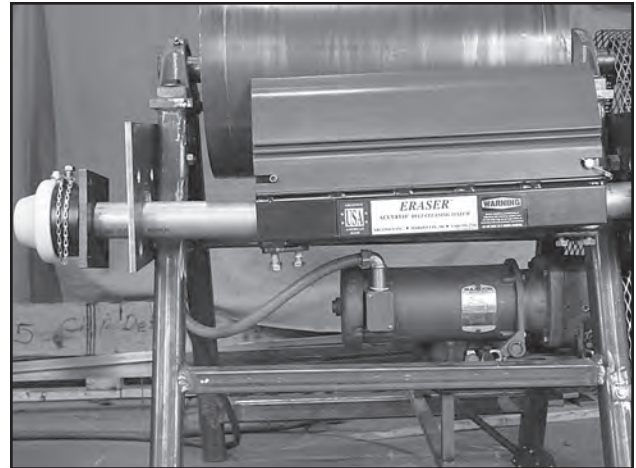


Lift the mainframe into position. Slide the mainframe onto the cartridge, then temporarily retighten the three setscrews on the tensioner side to stabilize system.

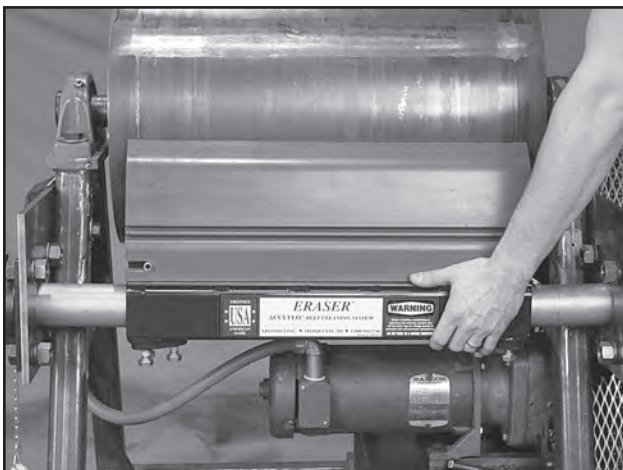
INSTALLATION - Dual Tensioner



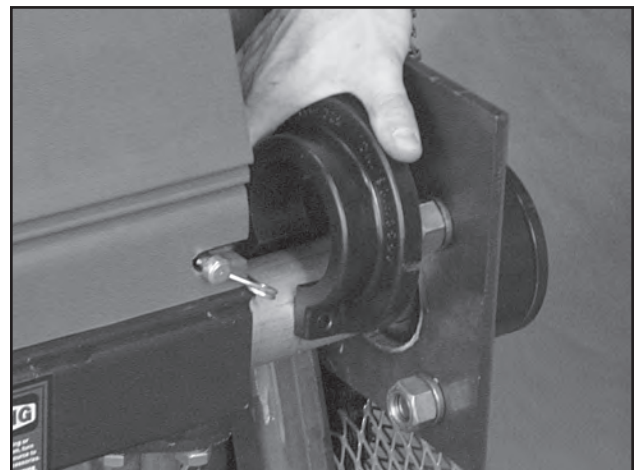
If there is not a lot of room between the chute walls, hold the mainframe in place and slide the tension cartridge into the mainframe. Bolt or weld the mounting spool into position and tighten the setscrews.



Slide the second tensioner cartridge through the chute wall and insert into mainframe. Temporarily retighten the setscrew on tensioner side to stabilize system. Bolt or stitch weld the mounting spool on the tensioner cartridge to the chute wall.



Loosen the setscrews and center the mainframe and blade to the belt. Tighten the setscrews to secure the stub ends.



Install the urethane locking collars by sliding them over the stub end, snugging them to the chute wall. Tighten the bolts to secure.

IMPORTANT

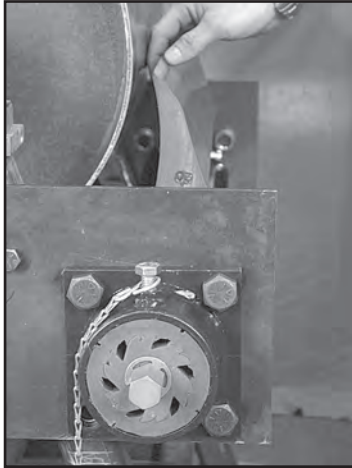
At the top point of the mounting spool, the inner ratchet catch must always point away from the load pulley.

PROCEED TO TENSIONING INSTRUCTIONS ON PAGE 8

INSTALLATION - Tensioning

Step Four: Tensioning

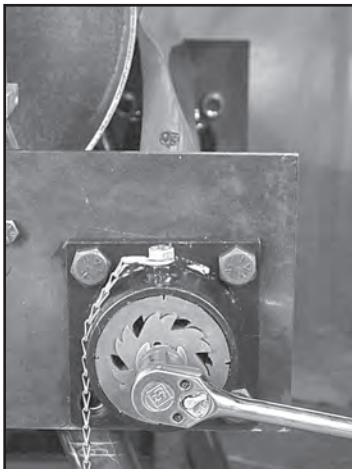
The Super-G system is equipped with our patented internal Perma-Torque tensioner and our Safe Torque ratchet system. The Perma-Torque is an adjustable elastomeric tensioner. The tensioner may be adjusted from a recommended minimum of 20 foot-pounds of force to a maximum of 80 foot-pounds. Exceeding tensioning of 24 clicks or 480° of rotation could damage the tensioner as well as the Safe Torque ratchet system. Four (4) clicks, or 90° of rotation is recommended for most applications.



To tension, first position the alignment notch on the outer ratchet catch with the mounting spool set screw. Grab the blade and rotate to align the ratchet notch.



When notch is aligned, tighten the setscrew. (Arrow indicates proper notch position.)



Use a 1" socket wrench on the exposed tensioner hex rod and turn the tensioner up and towards the pulley until the blade makes contact with the belt. Start tensioning by counting the clicks until you have reached the desired rotation. Four (4) clicks or 90° of rotation is the factory recommended setting. Repeat the same number of clicks on the opposite side for a dual tensioner system. Re-attach the dust cap(s).

Guideline for tensioning belt cleaning systems

Blade width (mm)	Blade width (in)	No. of clicks	Lbs of force	
250-700	10-26	4	50	Single Tensioner
725-1150	28-44	5	60	
1175-1750	46-68	4	50	Dual Tensioner
1775-2700	70-106	5	60	
2725-3000	108-120	6	70	

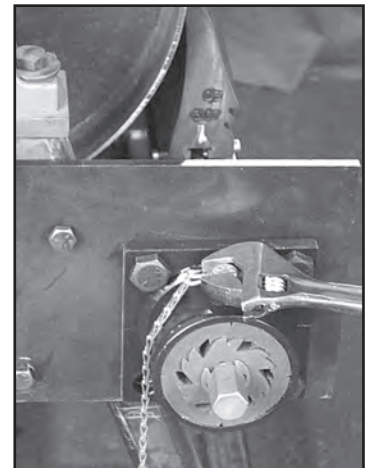
Do Not Overtension

Overtensioning will result in increased blade wear



←
**WATCH THE
TENSIONING
VIDEO**

Releasing Tension



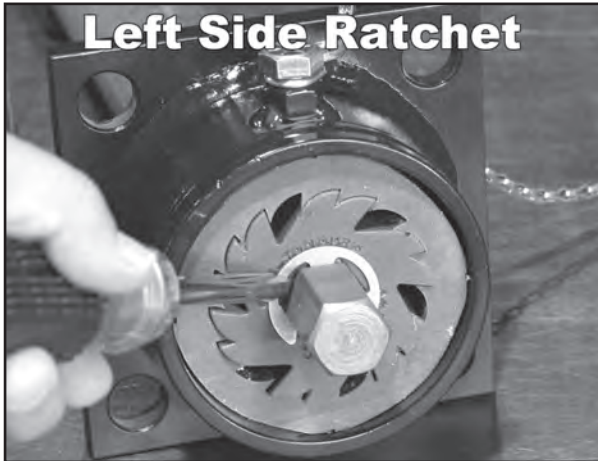
When you need to release tension, just loosen the mounting spool set screw. You will see the outer ratchet rotate as the tension is released.

**Installation of your Argonics Super-G belt cleaning system is now complete.
Maintenance or re-tensioning should not be required throughout the life of the blade.**

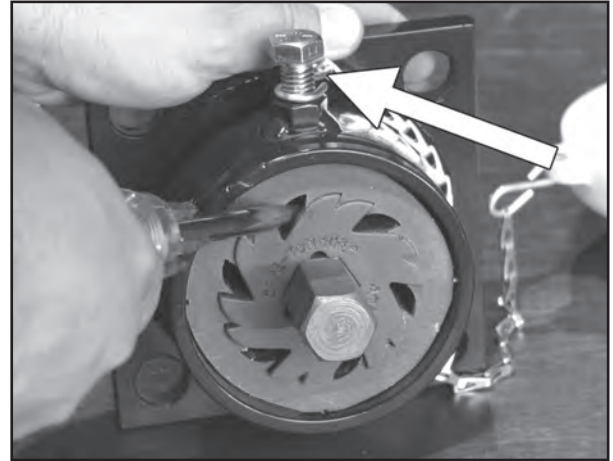
INSTALLATION - Left to Right Tensioner Conversion

Tensioner Conversion Instructions

To mount a single tensioned Super-G system with the tensioner on the right side instead of the left side, you will need to switch the entire tensioning spool to the other side of the mainframe, as well as the direction that the ratchet gears are oriented. It is recommended that you perform this conversion on the ground before the system is mounted.



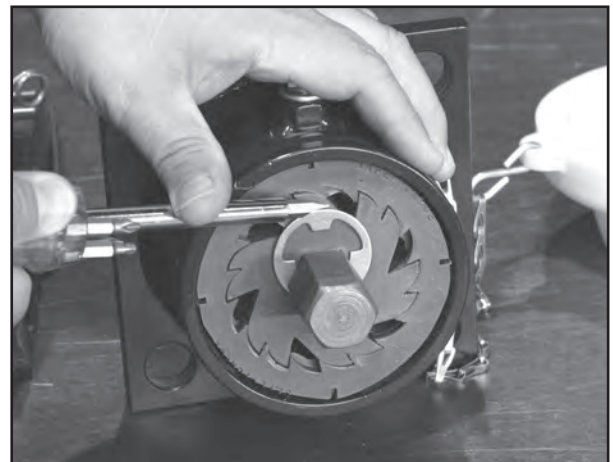
Remove the retainer clip from the hex rod using a flat blade screwdriver. Be sure not to lose the retainer clip.



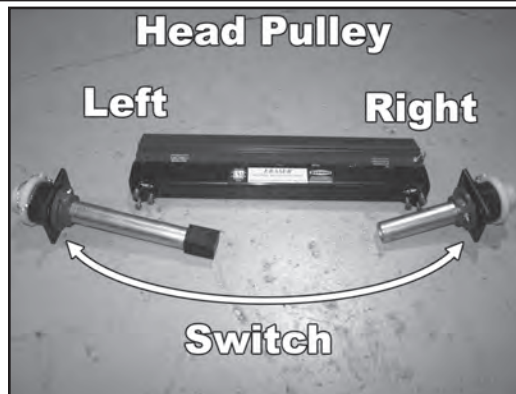
Unscrew the setscrew at the top of the mounting spool and remove both the inner ratchet and outer catch. Make sure you note what direction the gears are pointing.



Flip both the inner ratchet and outer catch so the gear teeth are pointed in the opposite direction and slide both back onto the hex rod.



Align the outer catch notch to the top of the mounting spool, tighten the set screw and then re-insert the retaining clip to the outer groove of the hex rod.



Your Super-G system comes with the tensioner mounted on the left. You will need to switch the entire mounting spool assembly to the right side of the mainframe.

IMPORTANT

At the top point of the mounting spool, the inner ratchet catch must always point away from your conveyor load pulley.

Continue following the installation instructions located on page 4.

REPLACING TUNGSTEN BLADES

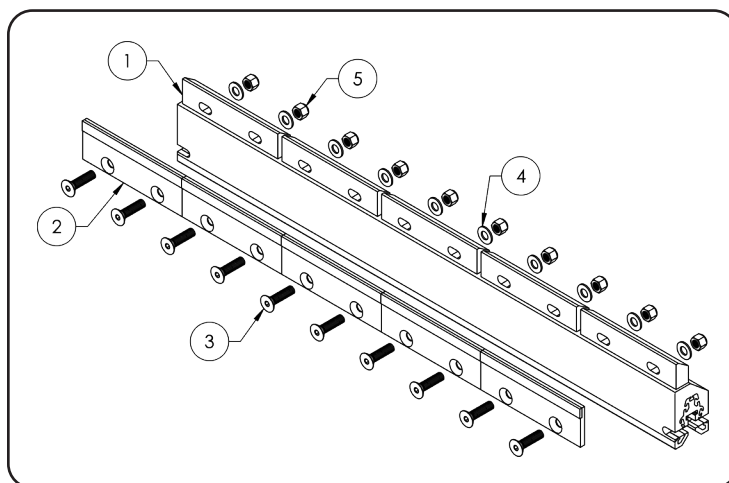
⚠ WARNING

Always obey all applicable safety rules.
Be sure all power to the conveyor has been
disconnected and controls are locked out.

Installation Tools Required

- 7/32" Allen Wrench
- 9/16" Wrench
- 1" End Wrench or Crescent Wrench

The tungsten blade features individual 6" long tungsten blades. Those blades allow you to replace just the tungsten blade tips (item #2), rather than the entire urethane holder.



Number	Part Number	Quantity	Description
1	CP-XH-B"XX"-G83	1	Tungsten Blade - Urethane Holder
2	CP-TH-B06A-T	varies	Replaceable Tungsten Blade Tip
3	CP-SG-288Z	varies	Flat Head Screw, 3/8-16X1.5", Zinc
4	WASH-0.38-F-SAE-ZINC	varies	Washer, 3/8 Flat, Zinc
5	NUT-013	varies	Nylon Locking Nut 3/8"-16 UNC Zinc

Step One: Release tension and remove blade

Using the 1" wrench, apply tension to the tensioner to hold it in place. Loosen the mounting spool set screw and slowly guide the outer ratchet back with the wrench to release the tension. Then remove the urethane holder from the cleaner assembly by releasing the snap pin.

Step Two: Remove metal tips and replace with new

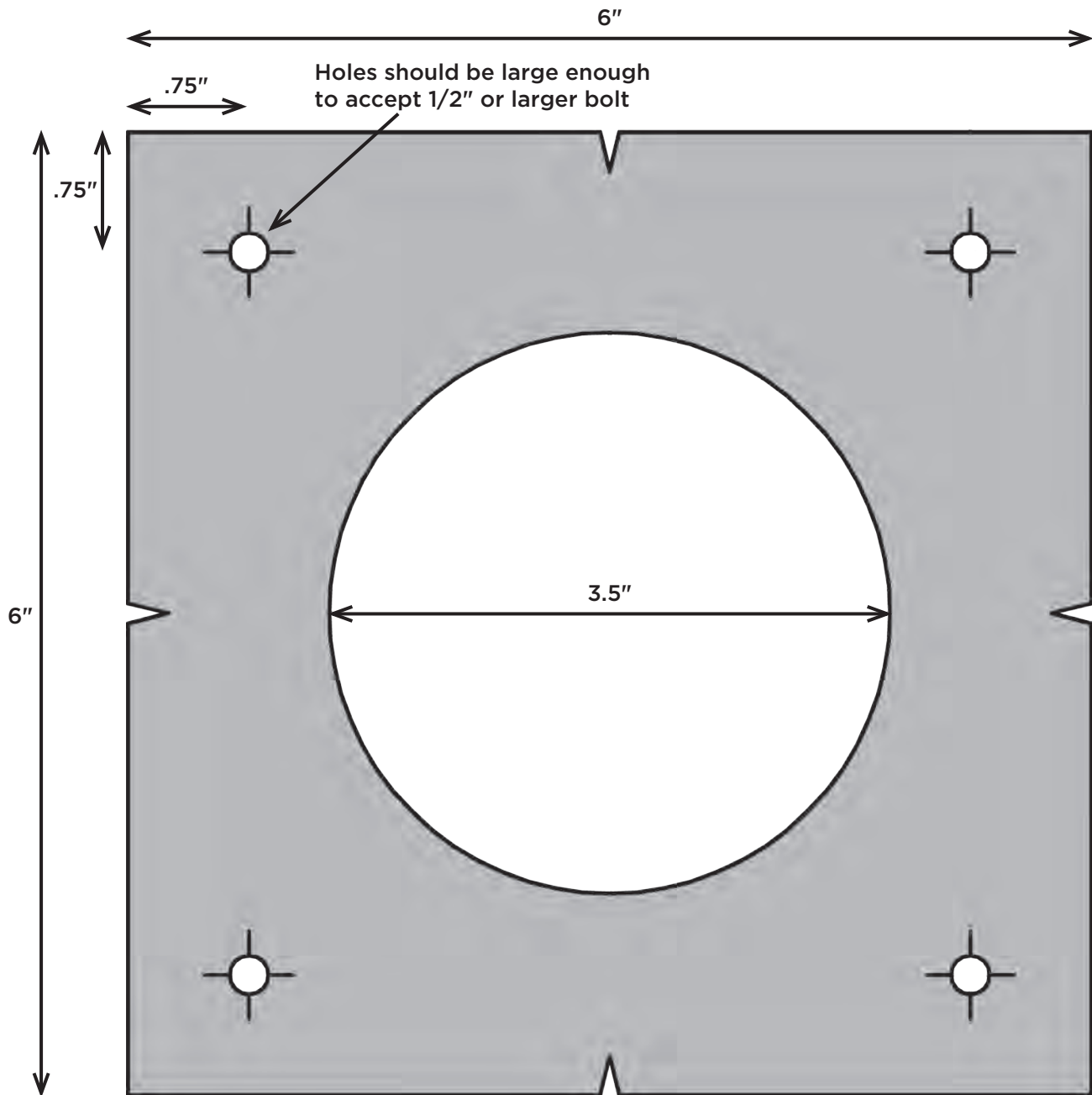
Remove the nuts, screws and washers attaching the tungsten tips to the urethane holder. Using the same hardware, replace the tungsten tips, ensuring that the tops of the tips are even.

Step Three: Round off corner of outside blades

The outside corners of the endmost blade sections need to be rounded off to ensure that they don't cut into the belt. We recommend using a diamond grinding disc or wheel.

MOUNTING TEMPLATE

Transfer the drawing below to cardboard, and use as your mounting spool template.



Template is drawn to actual size.

OTHER QUALITY PRODUCTS FROM ARGONICS

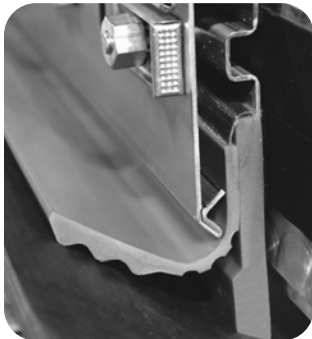
THE MOST RELIABLE AND COST-EFFECTIVE SKIRTING AVAILABLE

MADE WITH KRYPTANE® POLYURETHANE

Argonics formulates unique proprietary Kryptane polyurethane materials tailored to meet the demands of your wear application, whether it be sliding or impact abrasion, sticking or corrosion.

BENEFITS OF ARGONICS POLYURETHANE SKIRTING:

- 6 - 10 times the wear life over rubber
- 60% lower coefficient of friction compared to rubber, which reduces drag on conveyor motor
- Will not groove your conveyor belt when installed correctly



FOLD-N-SEAL™

If you're looking for a quality multi-sealing conveyor skirting solution that isn't hard on your budget, look no further: Fold-n-Seal is your answer.

Fold-n-Seal gives you the best of both worlds: material and dust containment in one unique solution. The primary seal keeps the material where it should be - on the belt. The secondary seal keeps dust and particulate material under control.



SNAP-LOC™ DUST SEAL

Snap-Loc is the gold standard for dust containment skirting. This straight-forward, no-nonsense design for dust control snaps into standard unistrut railing that can be bolted or welded into place.

Snap-Loc Dust Seal is engineered to create a perfect seal that follows the contours and low spots of the belt between trough rollers. No additional adjustments are needed for the life of the seal, saving you in both cost and hours of maintenance.



LOAD ZONE CONTAINMENT SKIRTING

Designed to do one thing and do it well: contain material at the transfer points on your belt line. The extra-rugged reinforced design with 1/4" steel means that our Containment Skirting is extremely effective in reducing spillage, resulting in reduced clean-up labor.

Containment skirting is available with either a flat or 20° beveled edge, and in 60" and 96" lengths. Varying heights and thicknesses available.



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