

Installation Guide

ARGONICS
ENGINEERED POLYURETHANE



RTS™

Conveyor Belt Cleaning System



⚠️ WARNING

Always obey all applicable safety rules.

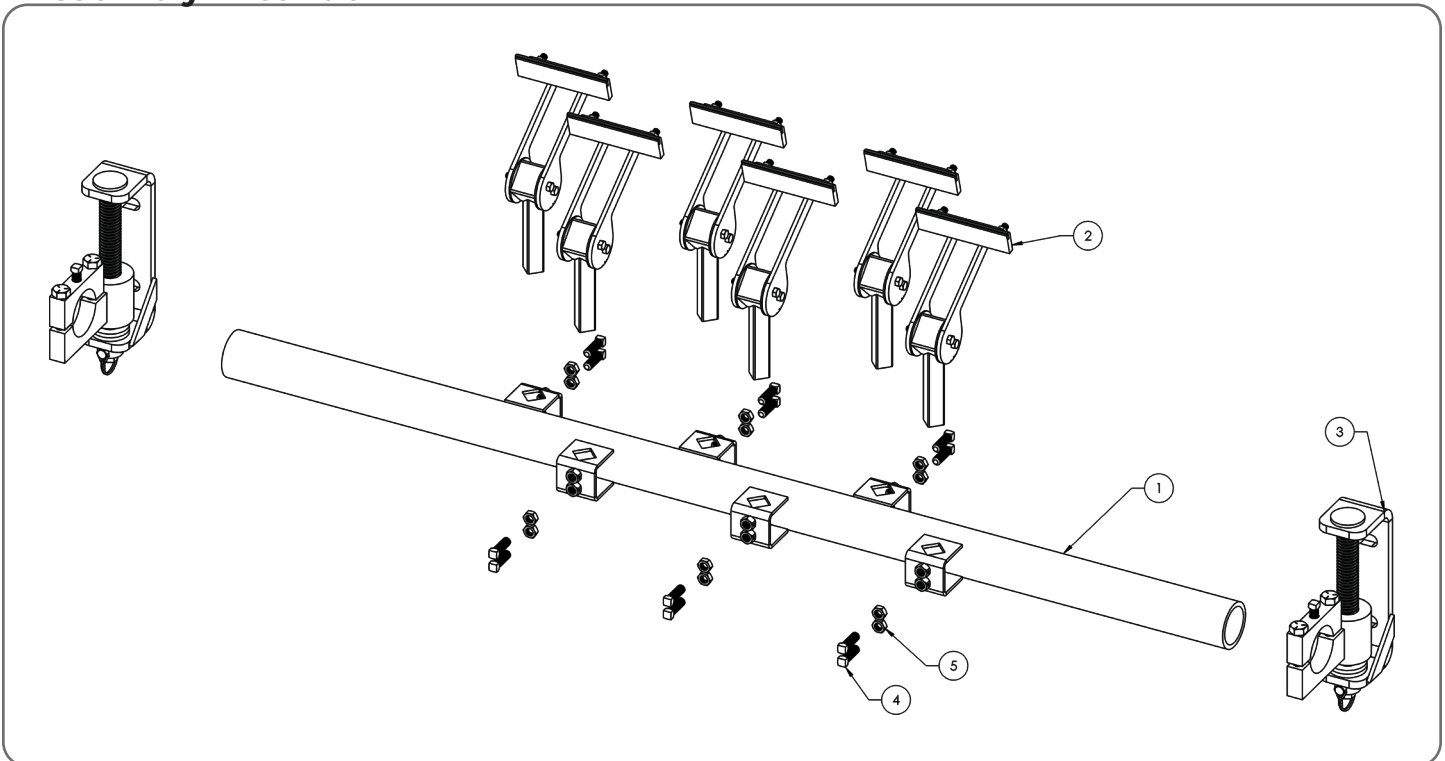
Be sure all power to the conveyor has been disconnected and controls are locked out.

Installation Tools Required

- Tape measure
- Cutting torch, if needed
- Level
- Scribe or Chalk
- Loctite threadlocker blue
- Welder or Drill
- Wrenches, sizes $\frac{3}{8}$ " , $\frac{1}{2}$ " , $\frac{9}{16}$ " , $\frac{3}{4}$ " , $\frac{15}{16}$ "
- $\frac{3}{4}$ " bolts, qty: 4
- $\frac{1}{4}$ " x 3" x 3" angle iron, if needed

Bolts, lock washers and nuts for mounting are not supplied

Assembly Breakdown



Number	Part Number	Quantity	Description
1	CP-RTS-MXXA	1	Mainframe
2	CP-RTS-B0601A	Varies	6" Blade Assembly
3	CP-RTS-T01A	2	Tensioner Assembly
4	CP-AR-5150S	Varies	Set Screw, 1/2-13 x 1.50", Stainless
5	NUT-049	Varies	Nut, Thin Hex - 18-8 Stainless Steel

Step One: Location

The RTS should be positioned on the return side of the belt, after it leaves the head pulley. The cleaner should be installed where the belt is still flat.

Figure 1

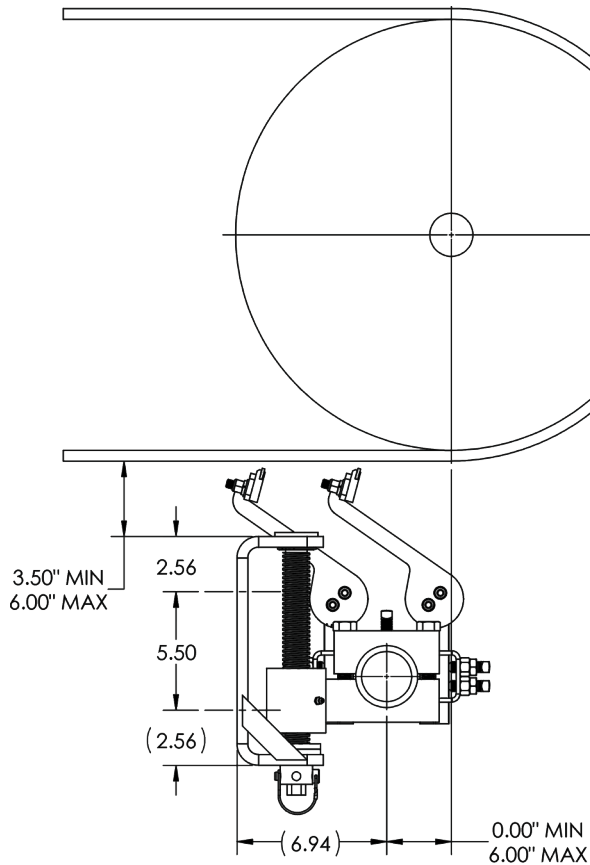
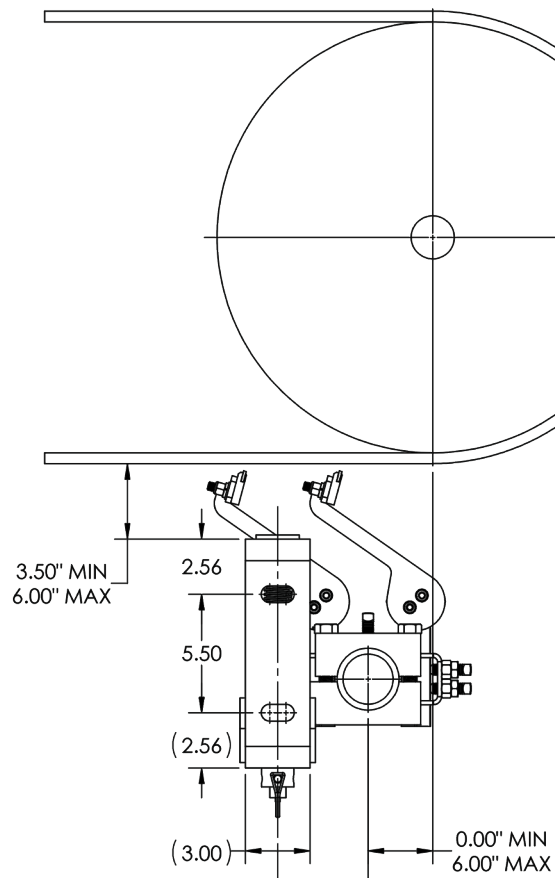


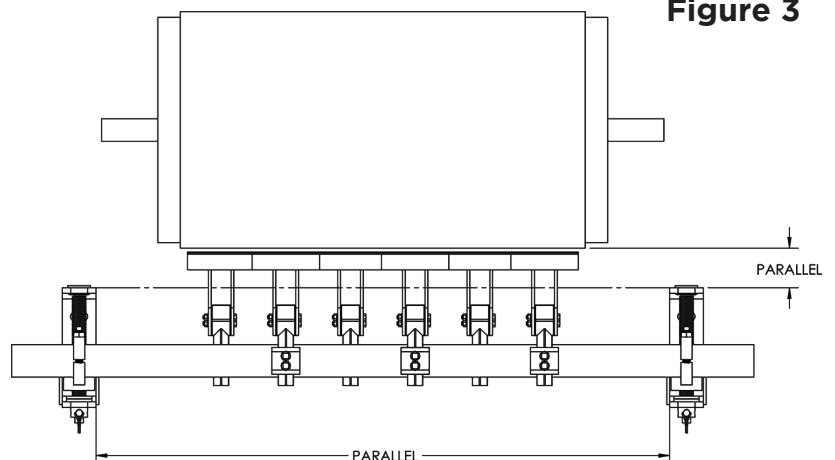
Figure 2



Step Two: Layout & Mounting

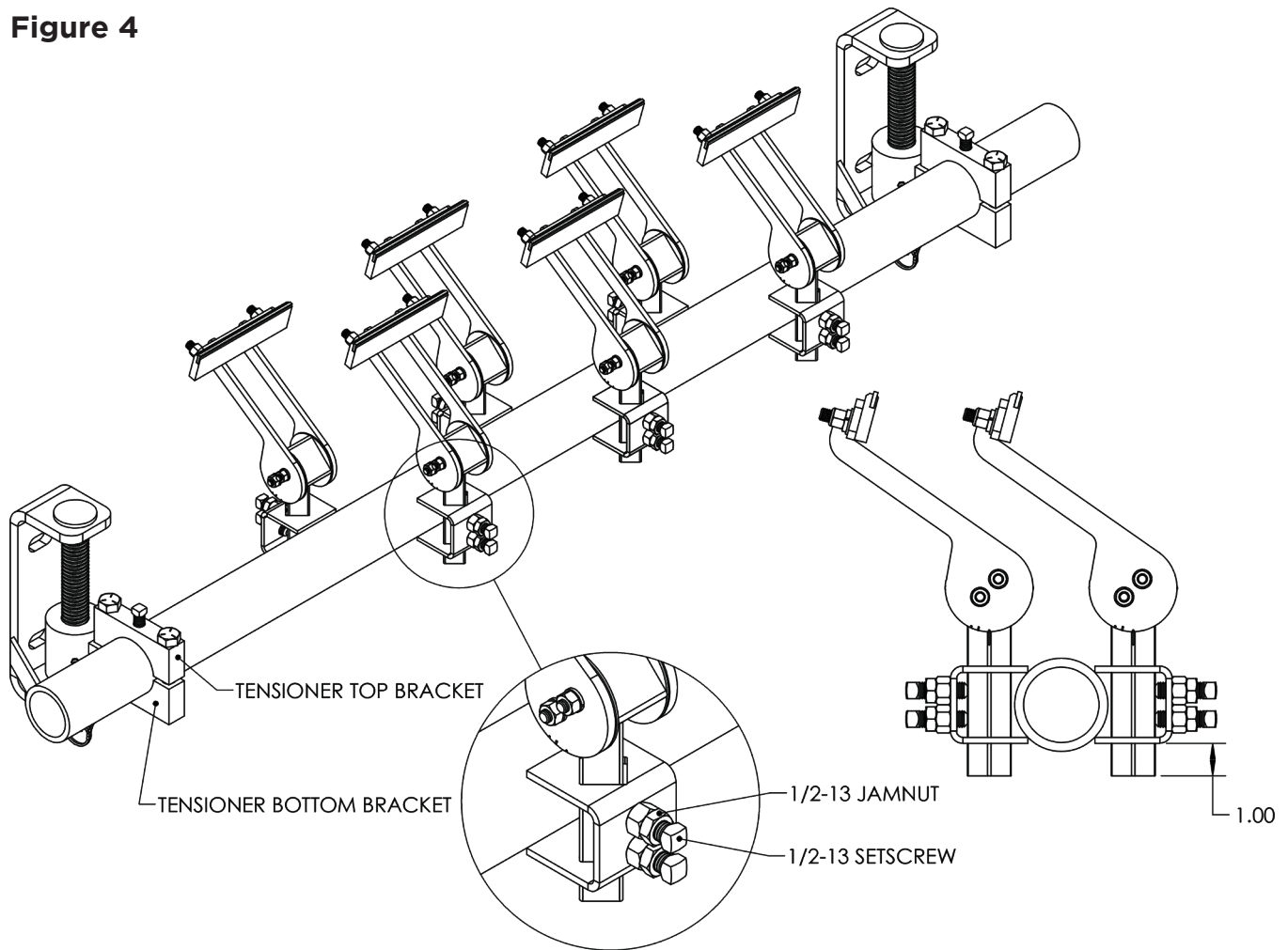
- When mounting the brackets, use **Figure 1 or 2** to determine the mounting location. Add adequate structure to the conveyor if needed, e.g. 1/4" x 3" x 3" angle iron.
- Use 3/4" bolts (not supplied) to mount brackets to the installed structure. The brackets must be parallel to each other, relative to the conveyor belt. See **Figure 3**.

Figure 3



Installation

Figure 4



Step Three: Installing Mainframe & Blade Assembly

- A. Remove tensioner top bracket from tensioner.
- B. Assemble blade arms on mainframe with the supplied 1/2-13 set screws and jam nuts. Leave 1" of the bottom arm weldment to allow for adjustment when tensioning the system. See **Figure 4**. It is required to use Loctite threadlocker blue on set screws to avoid them loosening due to vibration.
- C. Set mainframe and arm assembly into the tensioner bottom bracket.
- D. Reassemble the tensioner top bracket before tightening the 5/8" bolts and set screw. Rotate the mainframe, ensuring that the arms are parallel to the conveyor belt. See **Figure 5**.
 - i. Torque specs
 - 1. 5/8-11 bolt = 100 ft-lbs min.
 - 2. 1/2-13 set screw = 45 ft-lbs

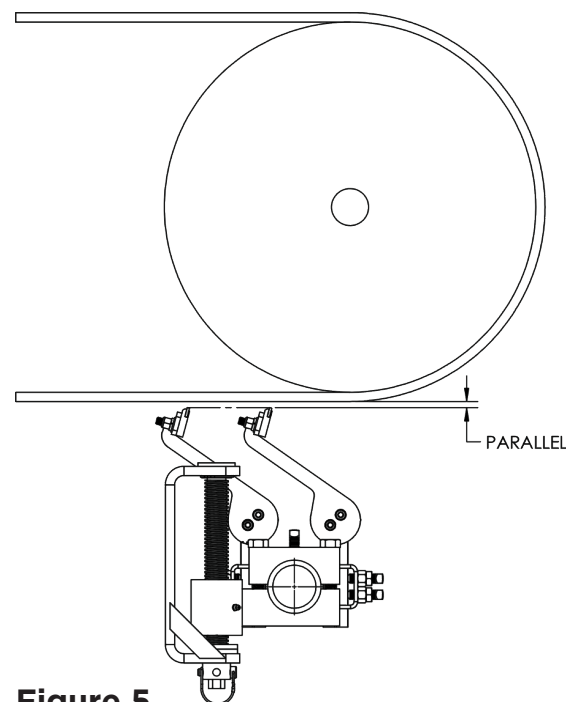


Figure 5

Step Four: Prep for Tensioning

- A. Remove locking clevis pin from bottom of each tensioner.
- B. Using a wrench, spin the hex head equally on each side counterclockwise to move the mainframe and blades toward the conveyor. Do this until the blades just touch the conveyor belt. See **Figure 6**.
- C. All blades should be equally touching the belt and be parallel to the conveyor belt. If adjustment is needed, loosen the set screw and raise the blade until it touches the belt. If the blade tips are not parallel to the belt, loosen the nuts on the back side of the tungsten blade, push the tungsten-tipped holder flush with the belt, and tighten the nylon lock nuts. **Warning: if the blade is not flush and only one corner/edge of the blade is touching the belt, it will gouge the belt when tensioned.**
- D. Once all blades and arms are flush and parallel to belt, tighten bolts and set screws to recommended torque specs and tighten jam nuts to the welded nuts on the mainframe. The 1/2-13 set screws should have Loctite threadlocker blue applied. See **Figure 7**.
 - i. Torque specs
 1. 1/2-13 set screw = 45 ft-lbs
 2. 3/8-16 nut on back of tungsten holder = 35 ft-lbs

Figure 6

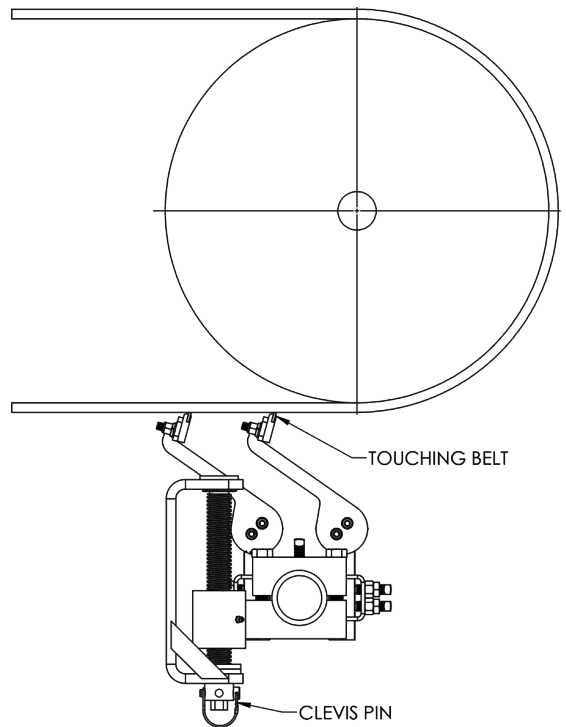
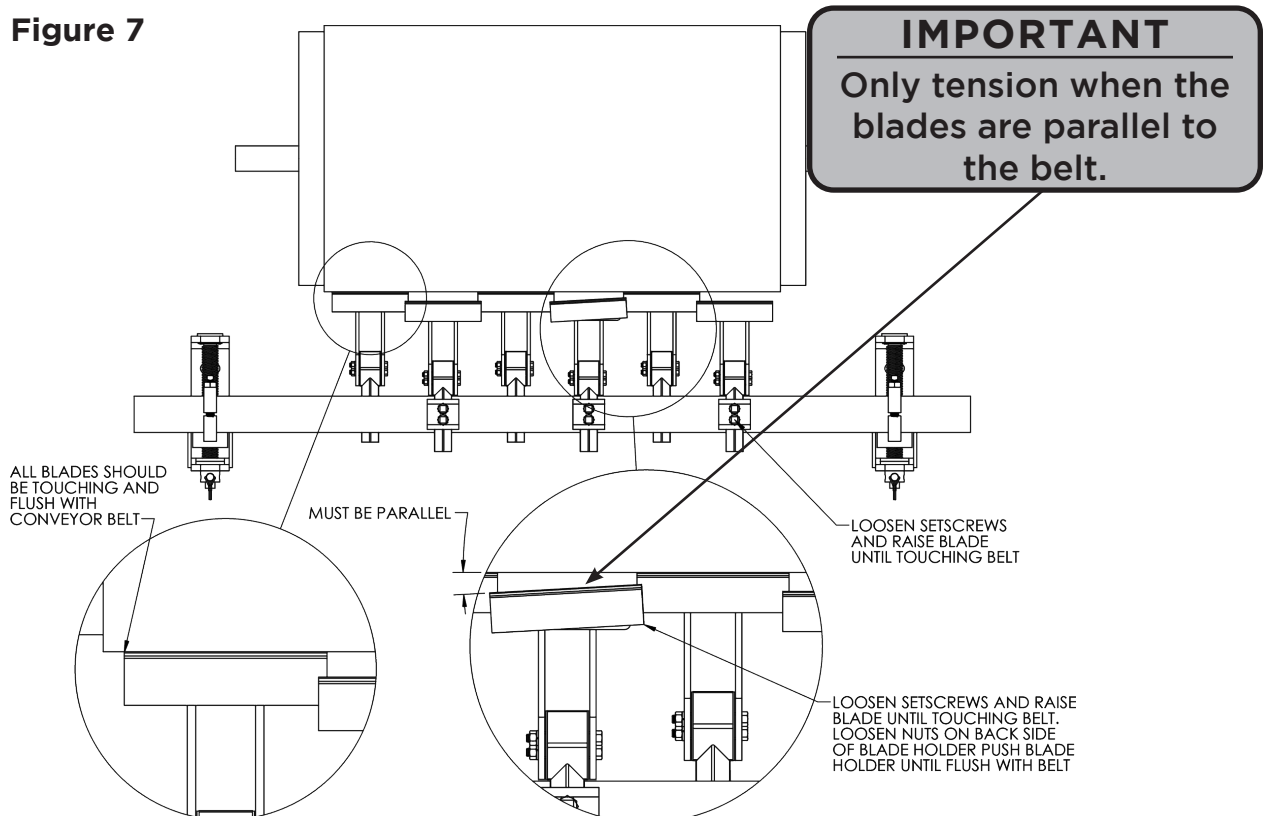
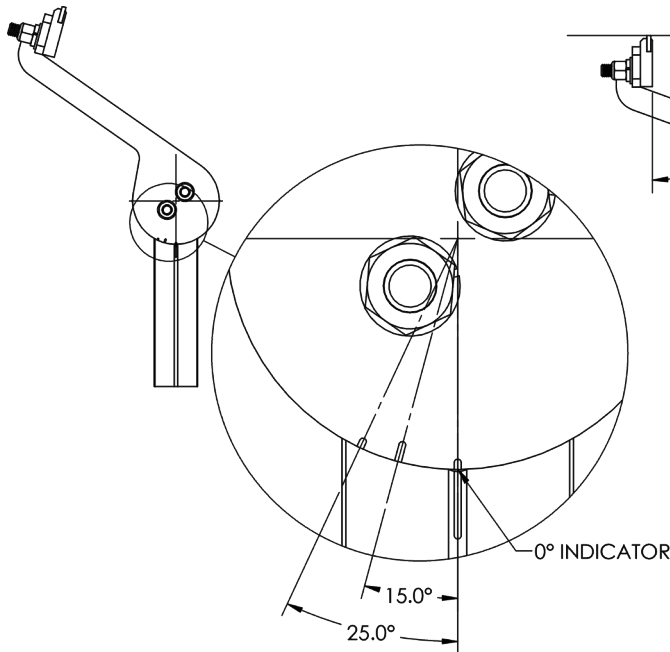


Figure 7



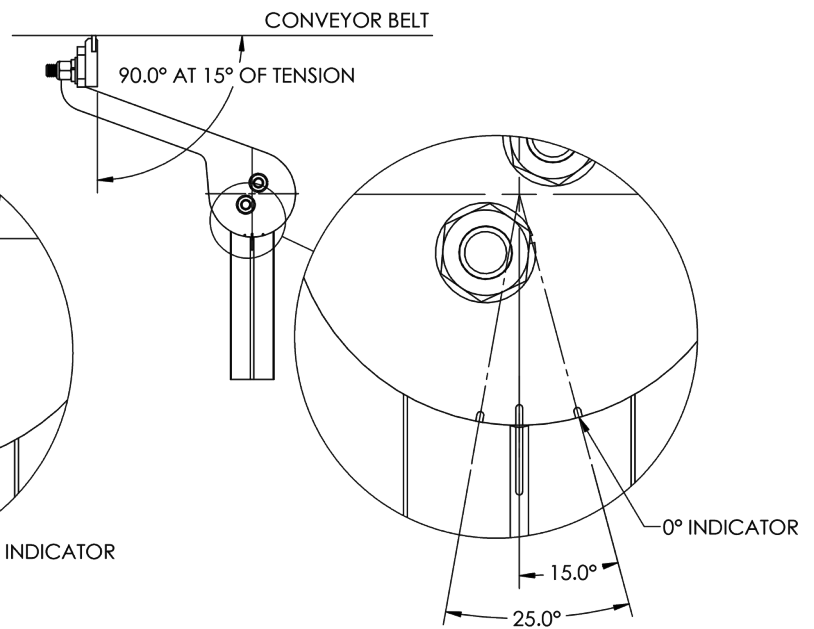
Installation

Figure 8



Blade arm with NO tension

Figure 9



Blade arm with recommended 15° of tension

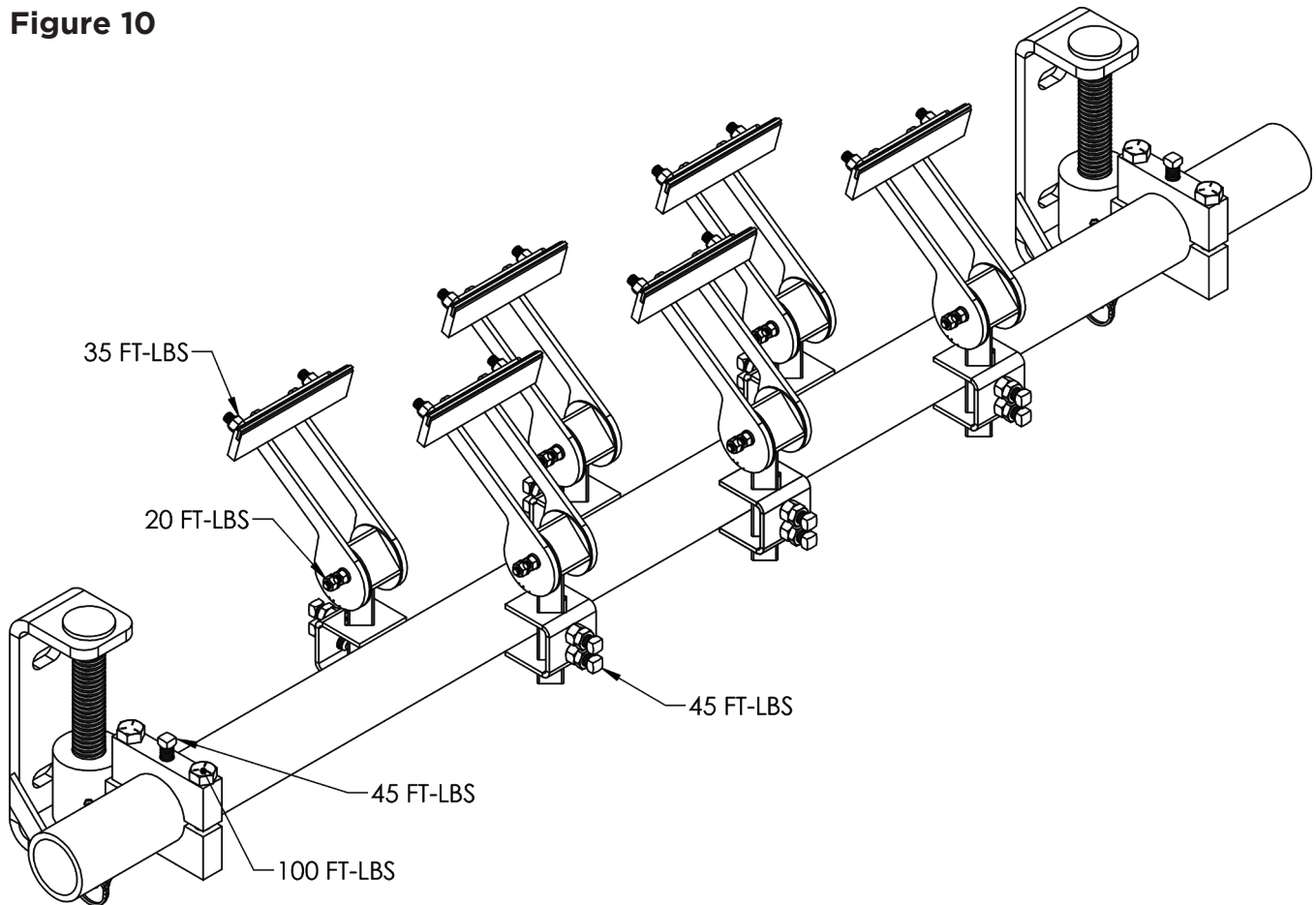
**RTS blade setpoint is 15° of rotation.
Do NOT go past the 25° indicator as it will cause damage.**

Step Five: Tensioning

- In each blade assembly there is a ROSTA tensioner. On the outer housing there are three small notches showing the angle of deflection on the internal tensioners. **Figure 8** shows what each notch represents.
- With the clevis pin removed from each tensioner, spin the bottom hex head counterclockwise equally on both sides until each blade assembly notch shows the recommended 15° of tension. See **Figure 9**. Do not go past the last notch (25°) as it will apply too much tension and destroy the internal ROSTA unit and may cause damage to the belt.
- Reinstall the clevis pins in the bottom of the tensioner to ensure the threaded rod does not loosen due to vibration over time. You may need to rotate the hex head to the nearest hole to insert the pin.

Installation is now complete.

Figure 10



Step Six: Maintenance of the System

- A. It is recommended that the system is checked daily for the first week of installation to ensure the system is not tensioned too much and is cleaning properly.
- B. Proper maintenance on tungsten systems is needed to avoid damage to the conveyor belt. Checking the system every two weeks is recommended to ensure the system is functioning properly.
- C. See **Figure 10** for recommended torques to all nuts and bolts.

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



DUO SEAL™

Engineered from 100% urethane, Duo Seal seamlessly integrates with most manufacturers' clamping systems, including our proprietary Wedge-Loc clamp.

The Duo Seal is designed with a flexible secondary seal that aligns perfectly with the belt, effectively containing dust and material. Its streamlined, compact design minimizes the amount of belt space needed outside the conveyor for installation.



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°, 35°, or 45° beveled edge, and in 60" and 96" lengths. Varying heights and thicknesses available.



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