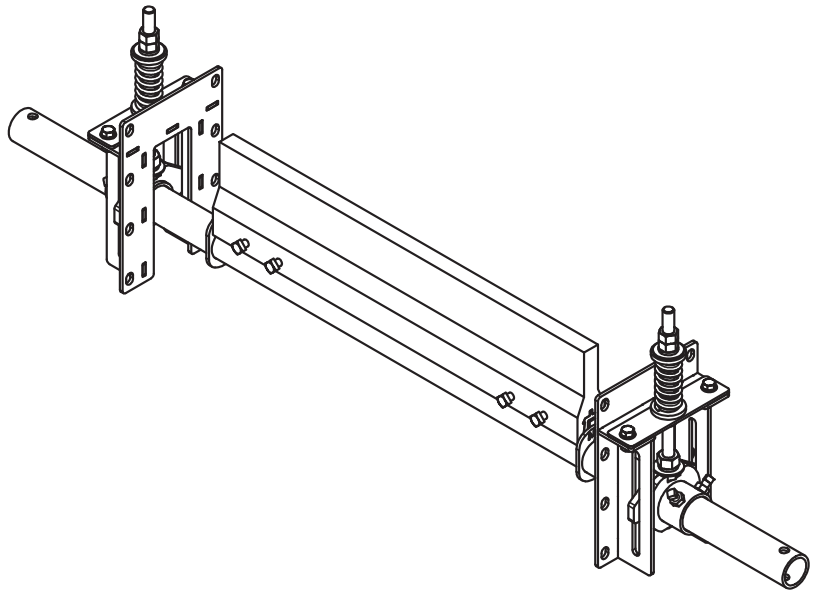


IT'S A NEW ERA OF
INNOVATION
AT AMERICAN EAGLE
MANUFACTURING



E8SC SERIES

INSTRUCTION MANUAL



FACILITY NAME

CONVEYOR NUMBER

DATE OF INSTALLATION

INSTALLED BY

DISCLAIMER/SAFETY

3.1 Disclaimer

American Eagle Manufacturing LLC disclaims any liability for improper use or application of this product not in compliance with instructions and specifications contained herein or for any damages due to contamination of material as a result of users' failure to maintain and inspect equipment. Liability shall be limited to the repair or replacement of AEM Equipment shown to be defective by cause of manufacturing.

PLEASE NOTE:

Urethane products being put into service after their expected shelf-life has been exceeded may deteriorate more quickly than urethane that is within that expected parameter. This shelf-life will be largely dependent on storage conditions; therefore, urethane products should remain in storage for as short a time as possible, in cool dry conditions and out of direct sunlight or heat. If appropriately stored, expected shelf-life is approximately 2 years. Upon visual inspection, if there are any questions as to the viability of a urethane part, please contact American Eagle Manufacturing or a distributor representative.

PLEASE NOTE:

American Eagle Manufacturing is not responsible for damage or loss occurring in transit. Upon receipt and/or inspection, if any damage to packaging has been noted, please retain any damaged packaging and/or goods. The delivery or freight service responsible for transit-damaged will require this packaging in order to file any claim for recompense. If anything is missing, please contact American Eagle Manufacturing or a distributor representative for replacement.

3.2 Safety

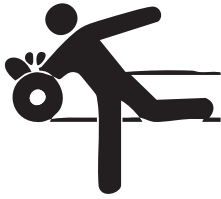
Adhere to all safety rules defined by government (OSHA/MSHA) 1910.147, owner/employer and site specific safety rules.

- DANGER -

Lockout/Tagout procedures must be followed before any maintenance, service, repair, or installation of equipment begins on the conveyor. Failure to follow all safety rules can result in injury or death.



SAFETY



DANGER

While the belt is running, do not approach conveyor or its accessories.



DANGER

Never adjust an operating belt cleaner. Follow all lockout/tagout procedures.



DANGER

If welding or cutting a chute wall prior to installation, be sure to test the dust/gas content in order to avoid explosion. Cover conveyor belt with flame-retardant material.



DANGER

Belt cleaner assembly, depending on belt width and installation factors, may require multiple people to lift. Please take appropriate precautions in order to avoid injury.



DANGER

Remove tools, accessories, and debris from area before returning conveyor to service.

CONTINUOUS IMPROVEMENT

***BECAUSE WE'RE ON A MISSION
TO SET THE STANDARD.***



Given everything that we've updated about our secondary cleaners, we're anticipating some questions.

Why do our secondary blades measure in at Belt Width + 3 inches?

Because we're basing it on the CEMA standard measurement for return rollers. CEMA C return rollers are normally at least equal to Belt Width +3 inches, in order to allow for the natural travel of the belt (up to 1-1/2 inches per side). They are designed that way to account for any belt alignment issues, while lessening the chance of the side walls being damaged while the belt is in motion.

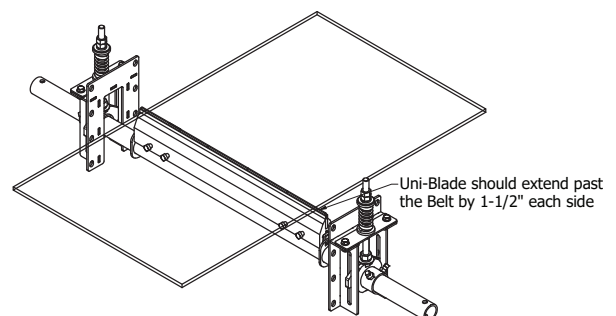
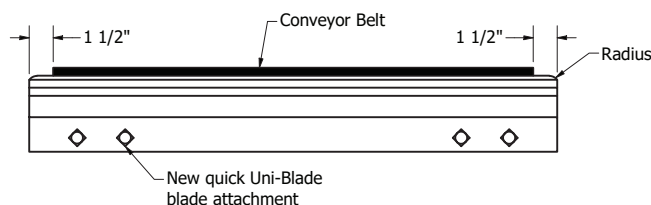
If the cleaner assembly doesn't account for the same variation and movement, you're running a high risk of your belt not being cleaned across the full width. Belt-width secondary cleaners didn't leave the same room for error that the return roller was designed for. So, after years of evaluation, we decided to base our blade width on the same standard, giving the same allowance for imperfection.

What about the carbide with the rounded corners?

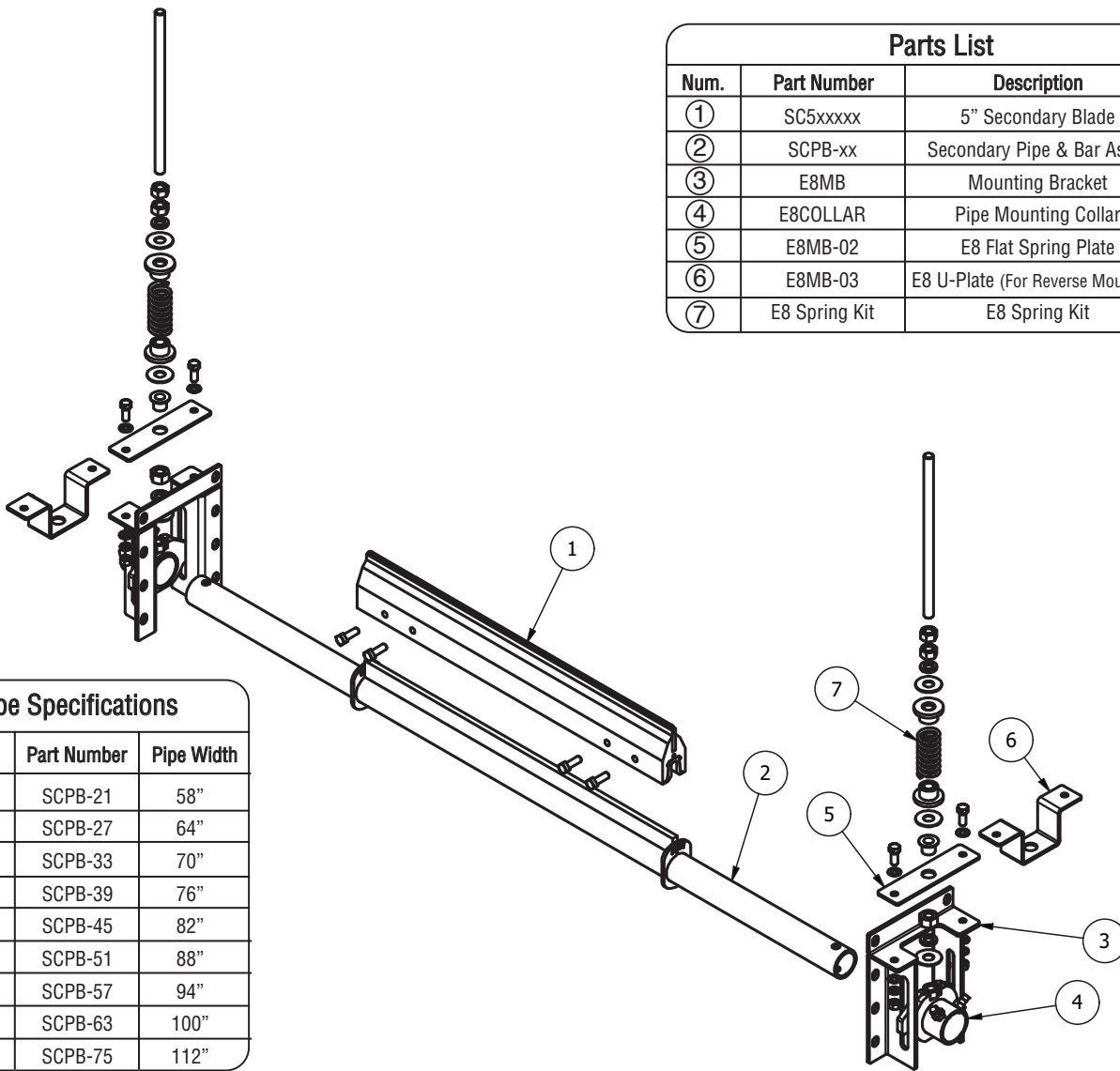
Another note we made during our research was the capacity for carbide-tipped blades to remove rubber while removing debris. So, in order to protect your belt, we also developed custom carbide inserts, with radiuses at the ends, to decrease the chance of damage, effectively avoiding the cutting points.

And how does the UniBlade design work for secondaries?

Regardless of OEM, the blade will simply drop onto the bar. Tighten the four included bolts after confirming placement, and the blade is installed. We really wish there were more words, but unfortunately, it's that simple.



E8SC5 SECONDARY REPLACEMENT PARTS



Parts List			
Num.	Part Number	Description	Qty.
①	SC5xxxx	5" Secondary Blade	1
②	SCPB-xx	Secondary Pipe & Bar Assy.	1
③	E8MB	Mounting Bracket	2
④	E8COLLAR	Pipe Mounting Collar	2
⑤	E8MB-02	E8 Flat Spring Plate	2
⑥	E8MB-03	E8 U-Plate (For Reverse Mounting)	2
⑦	E8 Spring Kit	E8 Spring Kit	2

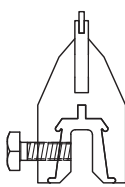
Pipe Specifications		
Belt Width	Part Number	Pipe Width
18"	SCPB-21	58"
24"	SCPB-27	64"
30"	SCPB-33	70"
36"	SCPB-39	76"
42"	SCPB-45	82"
48"	SCPB-51	88"
54"	SCPB-57	94"
60"	SCPB-63	100"
72"	SCPB-75	112"

URETHANE BLADE



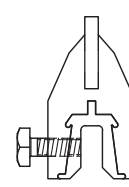
Belt Width	+3 Blade Width	AEM Part Number	Weight
24"	27"	SC5MUR27	13.5 lbs.
30"	33"	SC5MUR33	15 lbs.
36"	39"	SC5MUR39	19 lbs.
42"	45"	SC5MUR45	22 lbs.
48"	51"	SC5MUR51	25 lbs.
54"	57"	SC5MUR57	28 lbs.
60"	63"	SC5MUR63	31 lbs.
66"	69"	SC5MUR69	32.5 lbs.
72"	75"	SC5MUR75	35.5 lbs.
84"	87"	SC5MUR87	42.5 lbs.
96"	99"	SC5MUR99	48.5 lbs.

CARBIDE BLADE



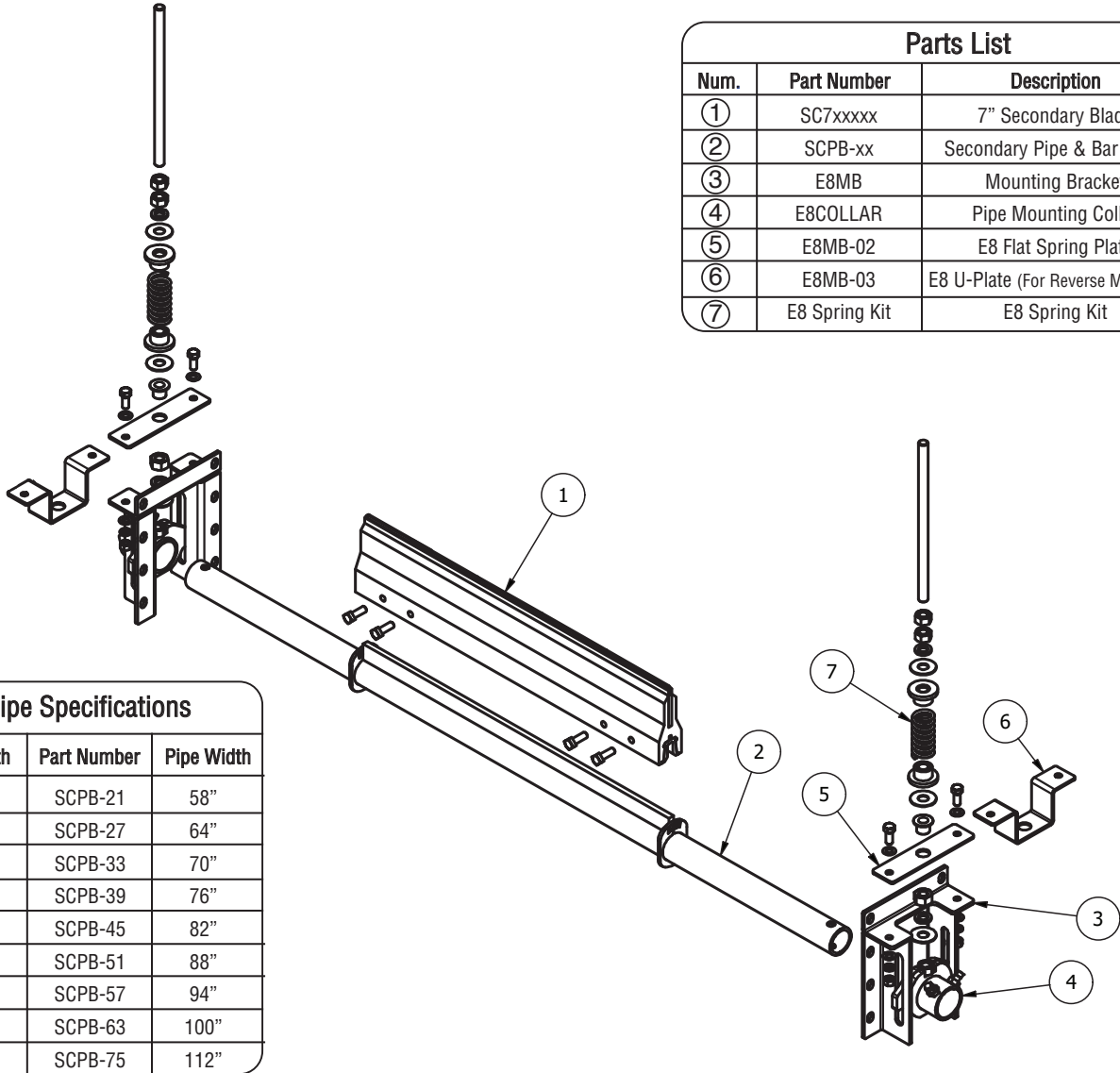
Belt Width	+3 Blade Width	AEM Part Number	Weight
24"	27"	SC5MGC27	16.5 lbs.
30"	33"	SC5MGC33	20 lbs.
36"	39"	SC5MGC39	23.5 lbs.
42"	45"	SC5MGC45	27 lbs.
48"	51"	SC5MGC51	30.5 lbs.
54"	57"	SC5MGC57	34.5 lbs.
60"	63"	SC5MGC63	37.8 lbs.
66"	69"	SC5MGC69	41.5 lbs.
72"	75"	SC5MGC75	45 lbs.
84"	87"	SC5MGC87	52.5 lbs.
96"	99"	SC5MGC99	59.5 lbs.

AR BLADE



Belt Width	+3 Blade Width	AEM Part Number	Weight
24"	27"	SC5MGA27	16.5 lbs.
30"	33"	SC5MGA33	20 lbs.
36"	39"	SC5MGA39	23.5 lbs.
42"	45"	SC5MGA45	27 lbs.
48"	51"	SC5MGA51	30.5 lbs.
54"	57"	SC5MGA57	34.5 lbs.
60"	63"	SC5MGA63	37.8 lbs.
66"	69"	SC5MGA69	41.5 lbs.
72"	75"	SC5MGA75	45 lbs.
84"	87"	SC5MGA87	52.5 lbs.
96"	99"	SC5MGA99	59.5 lbs.

E8SC7 SECONDARY REPLACEMENT PARTS



Parts List			
Num.	Part Number	Description	Qty.
①	SC7xxxx	7" Secondary Blade	1
②	SCPB-xx	Secondary Pipe & Bar Assy.	1
③	E8MB	Mounting Bracket	2
④	E8COLLAR	Pipe Mounting Collar	2
⑤	E8MB-02	E8 Flat Spring Plate	2
⑥	E8MB-03	E8 U-Plate (For Reverse Mounting)	2
⑦	E8 Spring Kit	E8 Spring Kit	2

②

Pipe Specifications

Belt Width	Part Number	Pipe Width
18"	SCPB-21	58"
24"	SCPB-27	64"
30"	SCPB-33	70"
36"	SCPB-39	76"
42"	SCPB-45	82"
48"	SCPB-51	88"
54"	SCPB-57	94"
60"	SCPB-63	100"
72"	SCPB-75	112"

URETHANE BLADE



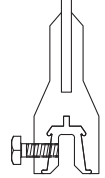
Belt Width	+3 Blade Width	AEM Part Number	Weight
24"	27"	SC7MUR27	16.5 lbs.
30"	33"	SC7MUR33	20 lbs.
36"	39"	SC7MUR39	23.5 lbs.
42"	45"	SC7MUR45	27 lbs.
48"	51"	SC7MUR51	30.5 lbs.
54"	57"	SC7MUR57	34.5 lbs.
60"	63"	SC7MUR63	38 lbs.
66"	69"	SC7MUR69	41.5 lbs.
72"	75"	SC7MUR75	45 lbs.
84"	87"	SC7MUR87	52.5 lbs.
96"	99"	SC7MUR99	59.5 lbs.

CARBIDE BLADE



Belt Width	+3 Blade Width	AEM Part Number	Weight
24"	27"	SC7MGC27	20.5 lbs.
30"	33"	SC7MGC33	28 lbs.
36"	39"	SC7MGC39	33 lbs.
42"	45"	SC7MGC45	38.5 lbs.
48"	51"	SC7MGC51	43.5 lbs.
54"	57"	SC7MGC57	48.5 lbs.
60"	63"	SC7MGC63	53.5 lbs.
66"	69"	SC7MGC69	59 lbs.
72"	75"	SC7MGC75	64 lbs.
84"	87"	SC7MGC87	74 lbs.
96"	99"	SC7MGC99	85 lbs.

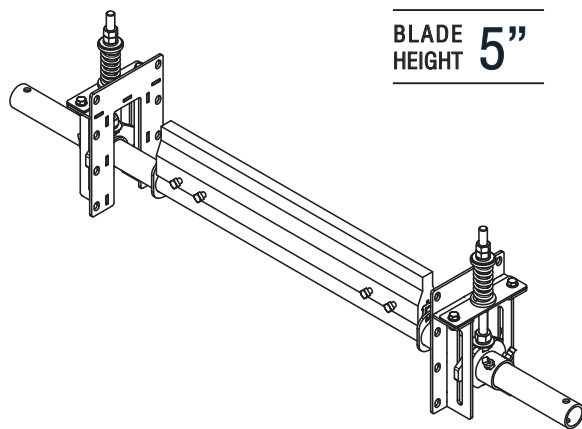
AR BLADE



Belt Width	+3 Blade Width	AEM Part Number	Weight
24"	27"	SC7MGA27	20.5 lbs.
30"	33"	SC7MGA33	28 lbs.
36"	39"	SC7MGA39	33 lbs.
42"	45"	SC7MGA45	38.5 lbs.
48"	51"	SC7MGA51	43.5 lbs.
54"	57"	SC7MGA57	48.5 lbs.
60"	63"	SC7MGA63	53.5 lbs.
66"	69"	SC7MGA69	59 lbs.
72"	75"	SC7MGA75	64 lbs.
84"	87"	SC7MGA87	74 lbs.
96"	99"	SC7MGA99	85 lbs.

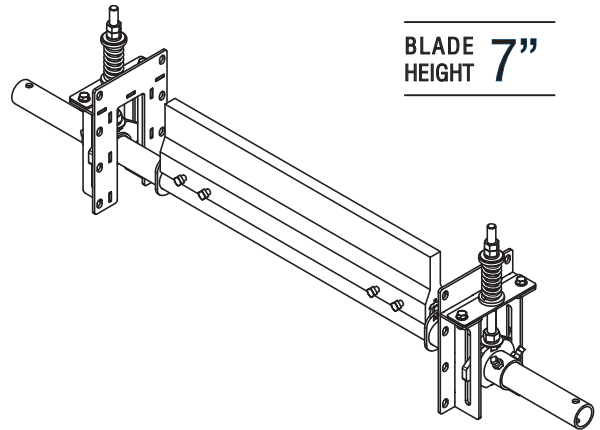
E8SC SERIES OPTIONS

E8SC5-M-UR Urethane Blade



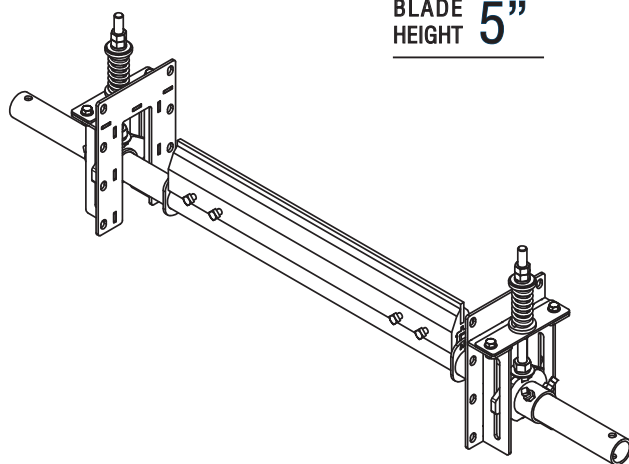
BLADE
HEIGHT **5"**

E8SC7-M-UR Urethane Blade



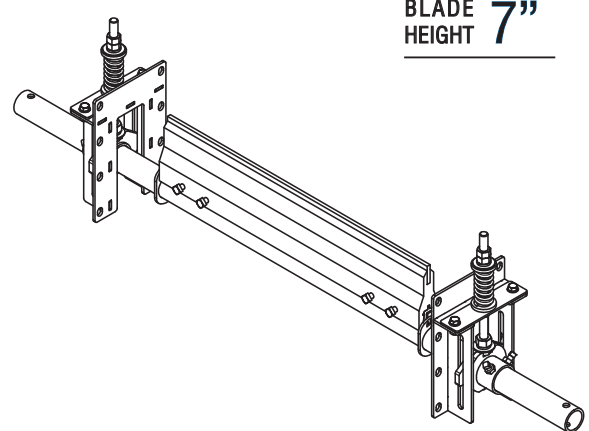
BLADE
HEIGHT **7"**

E8SC5-M-AR Blade



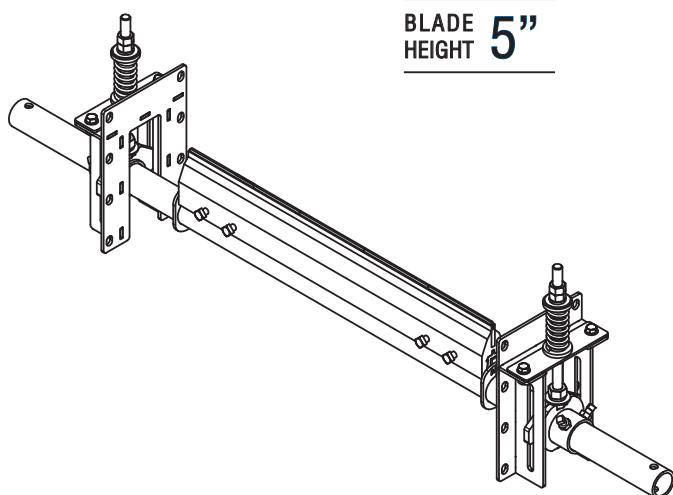
BLADE
HEIGHT **5"**

E8SC7-M-AR Blade



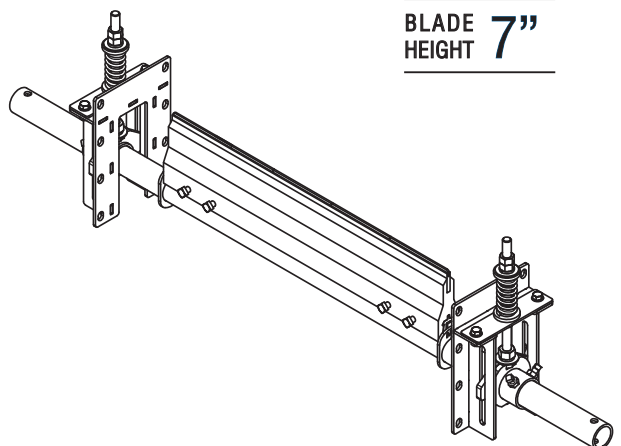
BLADE
HEIGHT **7"**

E8SC5-M-GC Carbide Blade



BLADE
HEIGHT **5"**

E8SC7-M-GC Carbide Blade



BLADE
HEIGHT **7"**

INSTALLATION CHECK LIST

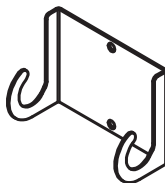
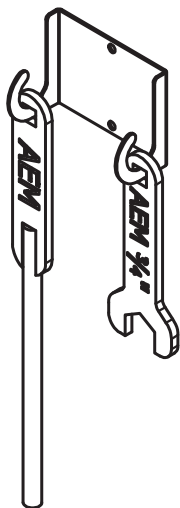
Confirmation of Cleaner Series and Size

- Check that the cleaner size is correct for the belt width
- Check the belt cleaner assembly and confirm all the parts are included

Tools Required

- (2) 6" C Clamps
- Tape Measure
- 3/4" (19mm) wrench
- Ratchet with 3/4" socket
- Cutting torch and/or drill

AEM Tool Kit for E8SC Cleaner



AEM Tool Holder Bracket

For hanging cleaner tools
Install by welding/bolting to chute
close to cleaner



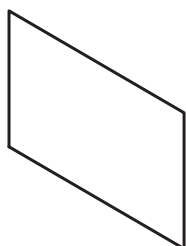
Cleaner Pipe Tool

For rotating pipe & blade to
correct angle



3/4" Cleaner Tool

For tightening/loosening all
hardware on cleaner and blade

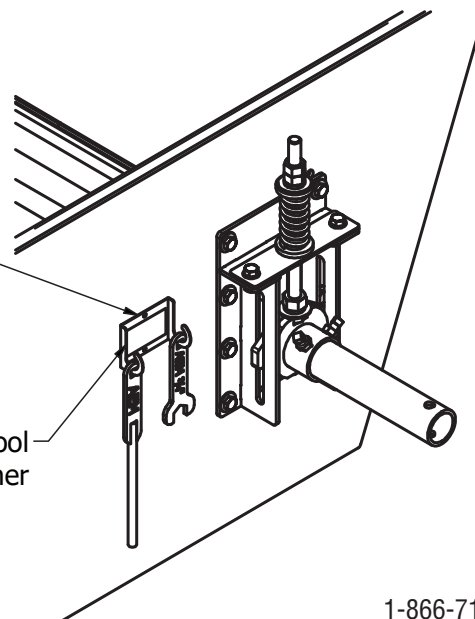


E8SC Cleaner Sticker

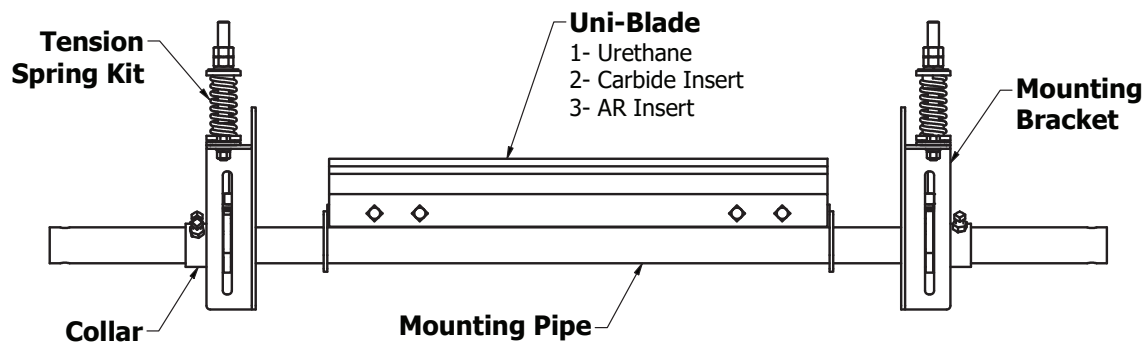
For identifying Cleaner
Place Sticker onto the AEM tool
Hold Bracket

Bolt/Weld Tool Kit
close to Cleaner

Place Sticker on Tool
Kit to ID Cleaner



E8SC INSTALLATION INSTRUCTIONS



***IMPORTANT: MAKE SURE CONVEYOR IS LOCKED OUT/TAGGED OUT BEFORE ANY WORK BEGINS.**

Step 1. - Location

It is preferred to install the Cleaner with Blade contact 4" downstream from the point where the conveyor belt leaves the Head Pulley (see Fig. A). If no room is available at this location, install the Cleaner with Blade contact 6" upstream from the Snub Roller.

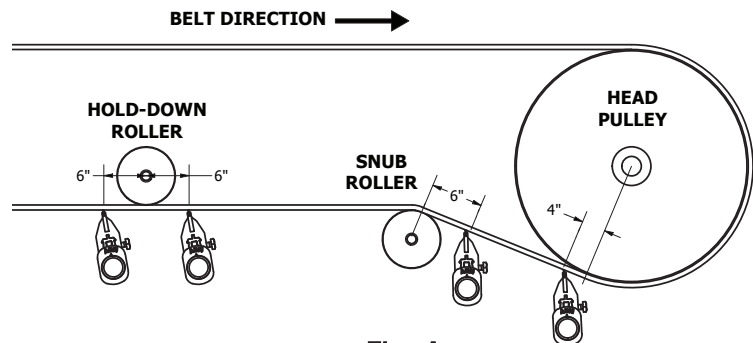


Fig. A

***NOTE: if Cleaner has to be installed further downstream and no Snub Roller is available, a Hold-Down Roller is recommended to ensure the belt is flat (no cupping) to achieve optimal cleaning. Install Cleaner 6" upstream or downstream of the Hold-Down Roller.**

Step 2. - Mounting Bracket Installation to Conveyor Frame

Draw a Blade Tip Location line on the belt and transfer the line to Chute Wall shown in Fig. B.

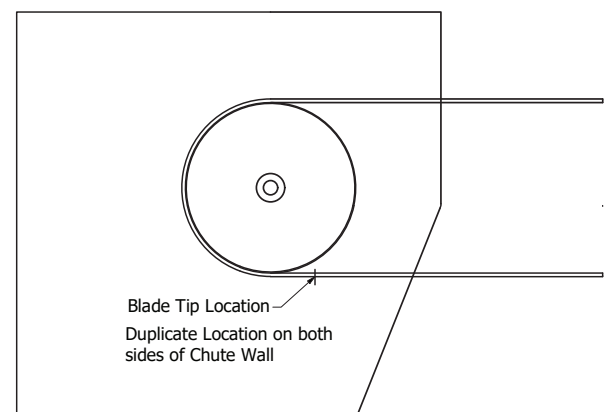
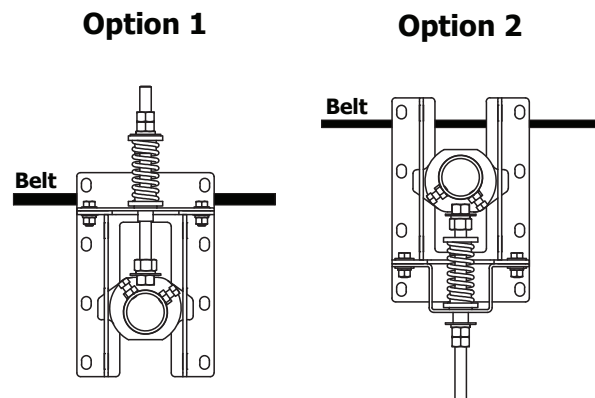


Fig. B

E8SC INSTALLATION INSTRUCTIONS

Step 3 - Mounting Bracket Options

Choose which option to instal the Mounting Brackets that gives the best access for tensioning of the Cleaner.



Step 4 - Blade and Mounting Pipe Access Hole

Measure and cut an access hole for the Blade and Mounting Pipe to the dimensions shown in Fig. C. Make sure the accesshole is a **minimum** of 10-1/8" x 3-5/8". Repeat step on opposite side of the chute.

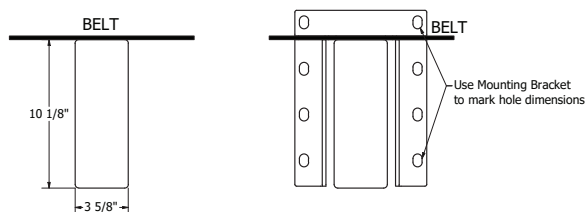


Fig. C

TIP:

Use Mounting Bracket to mark access hole locations.

Mark (8) bolt hole locations now to use in next step.

*IMPORTANT:

If cleaner must be mounted at an angle for better access or clearance, use the same steps to mark access hole locations as shown in Fig. D.

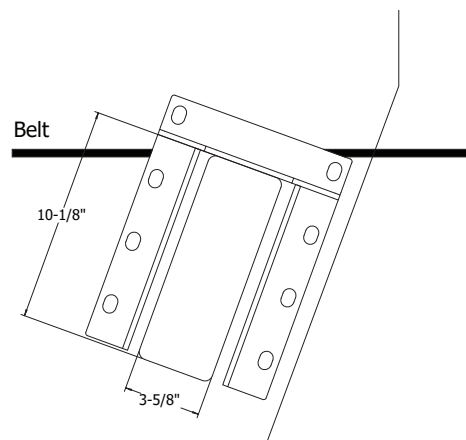


Fig. D

Step 5 - Attaching the Mounting Brackets to the Chute Wall

Drill or blow out holes for Mounting Bracket hardware. Install the Mounting Brackets to the chute walls using the provided hardware as shown in Fig. E. Use the 3/4" Cleaner Tool to tighten all hardware.

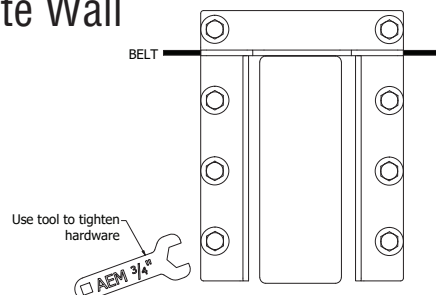


Fig. E

E8SC INSTALLATION INSTRUCTIONS

Step 6 – Mounting Bracket Options

Install the Uni-Blade to the Mounting Pipe. Tighten the set screws on the Uni-Blade using the $\frac{3}{4}$ " Cleaner Tool.

***NOTE:** If enough clearance is possible to allow access to the set screws, install the Uni-Blade with the set screws on the back of the Cleaner to prevent wear on the set screws.

***IMPORTANT: DO NOT OVERTIGHTEN THE SET SCREWS! THIS WILL CAUSE THE THREADS TO STRIP OUT!**

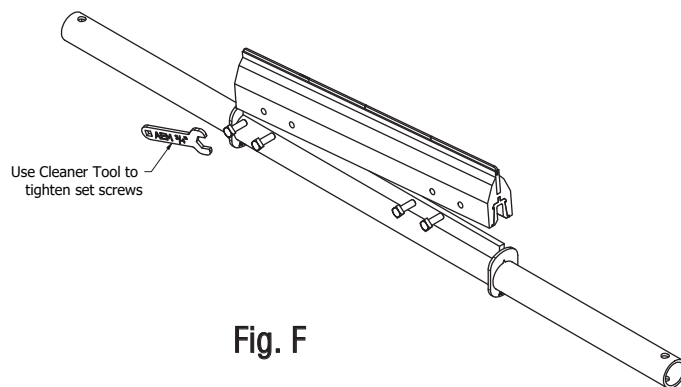


Fig. F

Step 7 – Installing Uni-Blade and Mounting Pipe

Pass the Mounting Pipe and Uni-Blade through the access hole in the Chute Wall as shown in Fig. G. Make sure the end of the Mounting Pipe is passed through the access hole in the opposite Chute Wall.

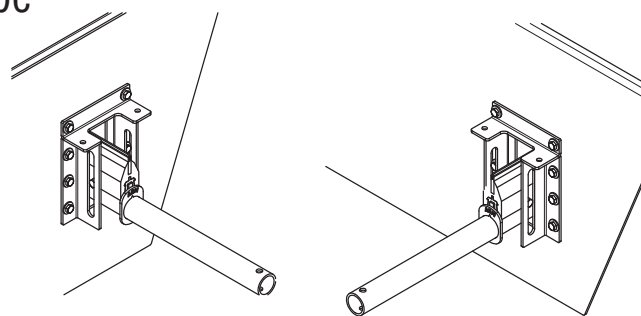


Fig. G

Step 8 – Installing Collar

Install the Collar onto the Mounting Pipe as shown in Fig. H. Slide the Collar over the Mounting Pipe with the tangs of the Collar pointing up and down. Insert the Collar into the Mounting Bracket and rotate the Collar until the tangs are set into the slots.

***NOTE:** The hex nut on top of the Collar should be either up for a top-mounted Tension Spring Kit or down for a bottom-mounted Tension Spring Kit.

Allow the Collar and Mounting Pipe to rest in the Mounting Bracket until the Tension Spring Kit is installed.

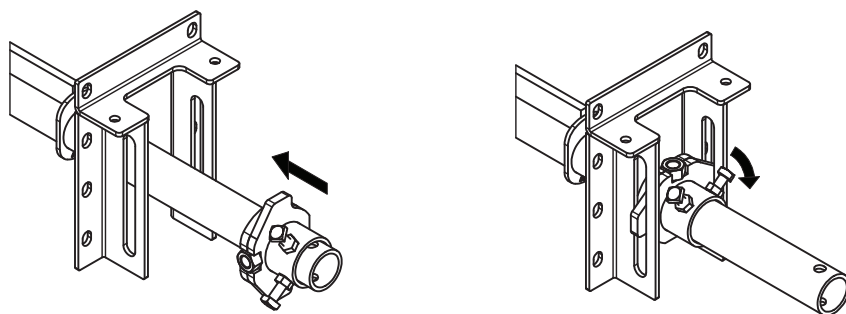


Fig. H

E8SC INSTALLATION INSTRUCTIONS

Step 9 – Installing Tension Spring Kit

Install either the flat plate on top of the Mounting Bracket for a top-mounted Tension Spring Kit or the U-shaped plate on the bottom of the Mounting Bracket for a bottom-mounted Tension Spring Kit as shown in Fig. I. Install the Bronze Bushing into the hole in the plate.

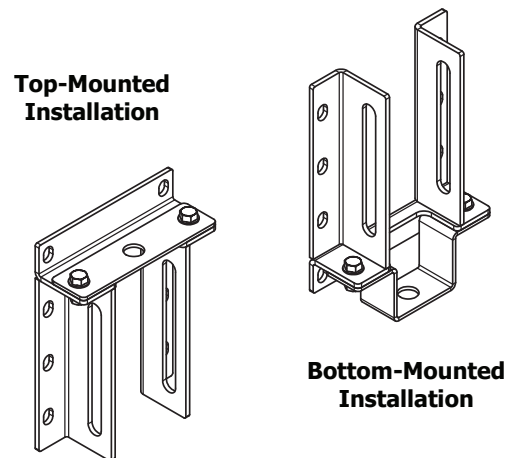


Fig. I

Install the Tension Spring Kit to the Mounting Bracket by passing the Threaded Rod through the Bronze Bushing and threading it into the hex nut in the Collar (see Fig. J). Tighten the Collar Jam Nut.

***IMPORTANT:** Make sure the Compression Spring is free of any tension. Loosen the Spring Jam Nut and Tensioning Nut to release the Compression Spring.

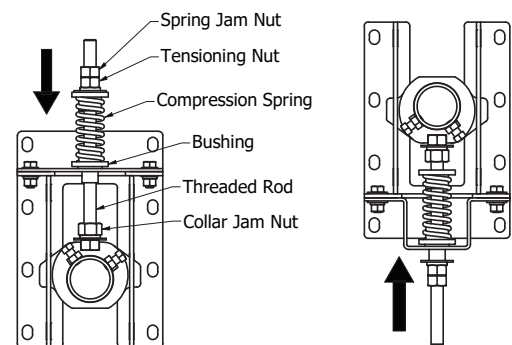
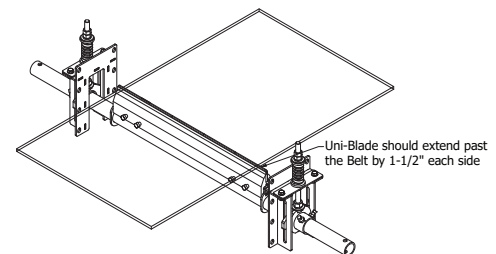


Fig. J

Step 10 – Positioning and Rotating Uni-Blade

Center the Uni-Blade on the Conveyor Belt, making sure that the Uni-Blade extends past the Belt by 1-1/2" on each side (see Fig. K).



E8SC INSTALLATION INSTRUCTIONS

Using the Cleaner Pipe Tool, rotate the Mounting Pipe and Uni-Blade as shown in Fig. L. Use the below parameters for setting the angle of the Uni-Blade.

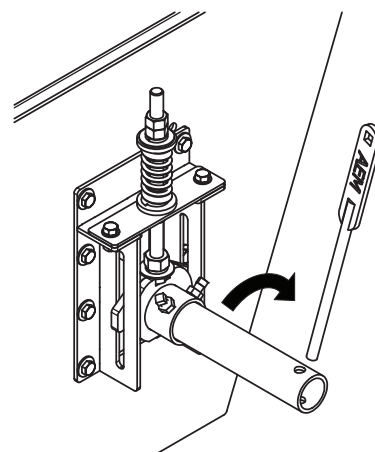
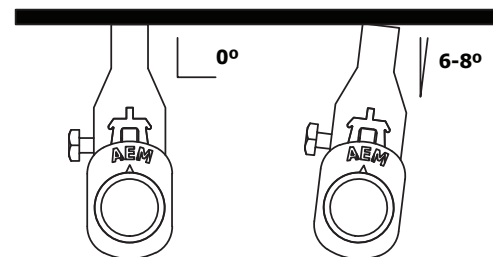


Fig. L

Urethane Uni-Blades

- 6-8° Angle
 - Can be 0° for reversing Belts
- (Urethane Uni-Blades ONLY!)



AR/Carbide Insert Uni-Blades

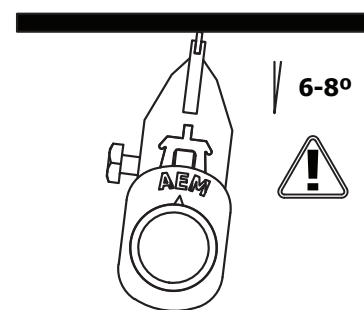
- 6-8° Angle ONLY!



6-8° Setting Angle is CRITICAL!

AR/Carbide Insert Uni-Blades CANNOT

CAUTION be used on Reversing Belts!



After setting the correct angle for the Uni-Blade and ensuring the Uni-Blade is centered on the Conveyor Belt, tighten the set screws connecting the Collar to the Mounting Pipe on both sides of the Cleaner.

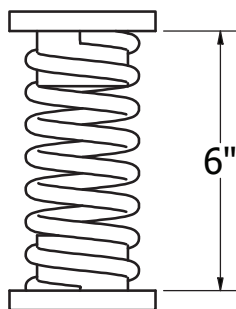
E8SC INSTALLATION INSTRUCTIONS

Step 11 - Adjusting Uni-Blade Tension

Raise the Uni-Blade up to the Conveyor Belt until the tip of the Uni-Blade is touching the Belt ***equally on both sides***.

Using a tape measure, adjust the tension ***equally on both sides***. The adjustments should be made using the Tension Spring Length Chart in Fig. M.

***IMPORTANT:** The adjustments should be **NO MORE THAN 1/8"** for Carbide- and AR-tipped Uni-Blades, and **NO MORE THAN 1/4"** for Urethane Uni-Blades.



Tension Spring Length Chart			
Blade Width	Carbide Blade	AR Blade	Urethane Blade
24"	5-7/8"	5-7/8"	5-3/4"
30"	5-7/8"	5-7/8"	5-3/4"
36"	5-7/8"	5-7/8"	5-5/8"
42"	5-7/8"	5-7/8"	5-1/2"
48"	5-7/8"	5-7/8"	5-1/2"
54"	5-7/8"	5-7/8"	5-3/8"
60"	5-7/8"	5-7/8"	5-3/8"
66"	5-7/8"	5-7/8"	5-3/8"
72"	5-7/8"	5-7/8"	5-1/4"

Step 12

Once everything is set at the proper tension, tighten all bolts on both sides of the Mounting Bracket Assemblies along with the Jam Nuts on the Tension Spring Kits.

Step 13

TEST RUN THE CLEANER. Make sure there is full coverage of the Belt with the Uni-Blade and full Blade contact. If vibration occurs or cleaning is insufficient, adjust Blade tension on both sides at 1/16" increments.

Step 14

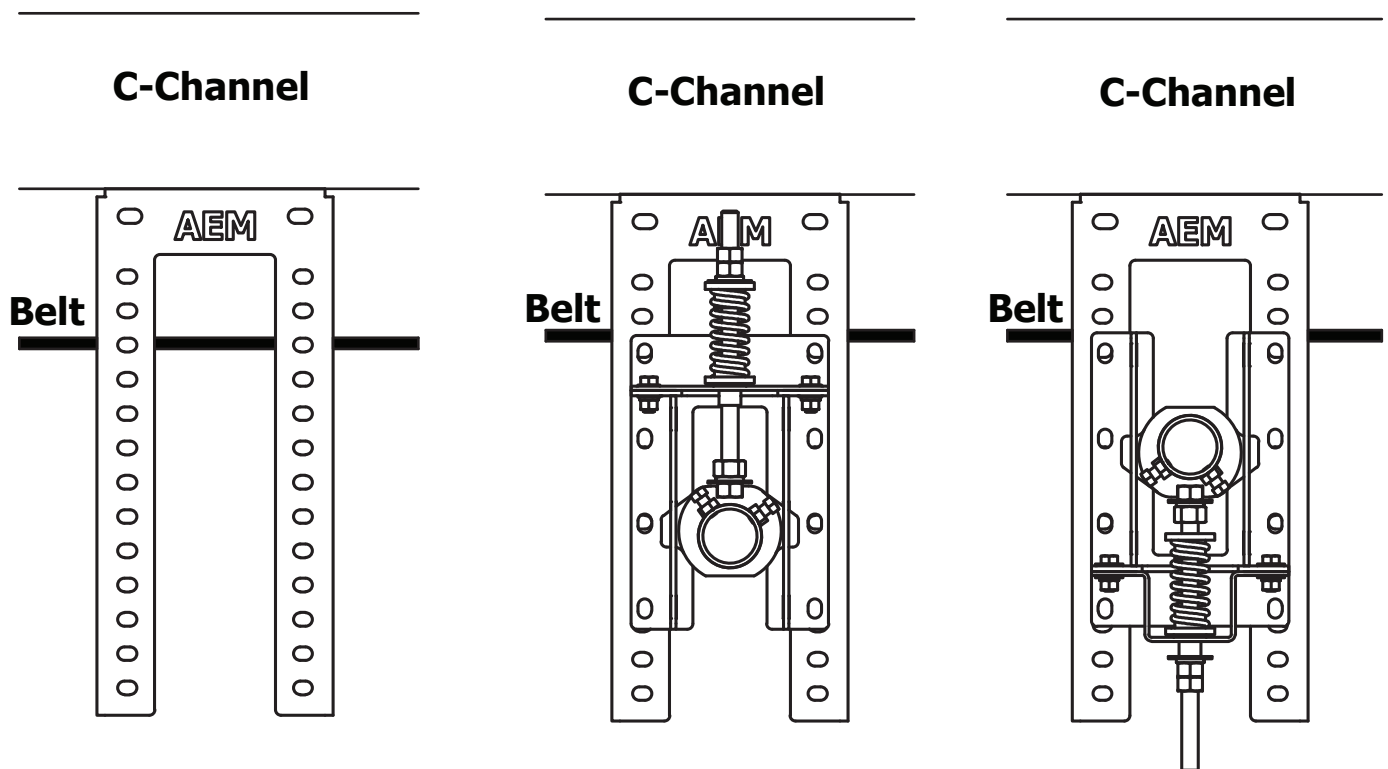
After ensuring that the Cleaner assembly is adjusted properly, trim the Mounting Pipe if necessary to avoid a tripping hazard.

E8SC INSTALLATION INSTRUCTIONS

Non-Chute Mounting Options

An E8 Mounting Bracket will be required or fabricate a plate to mount the Cleaner in an area without a Chute.

***IMPORTANT:** Make sure the Conveyor Belt is not cupping in this area. If cupping is occurring, use a Hold-Down Roller to keep Belt flat (refer to **STEP 1**).





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