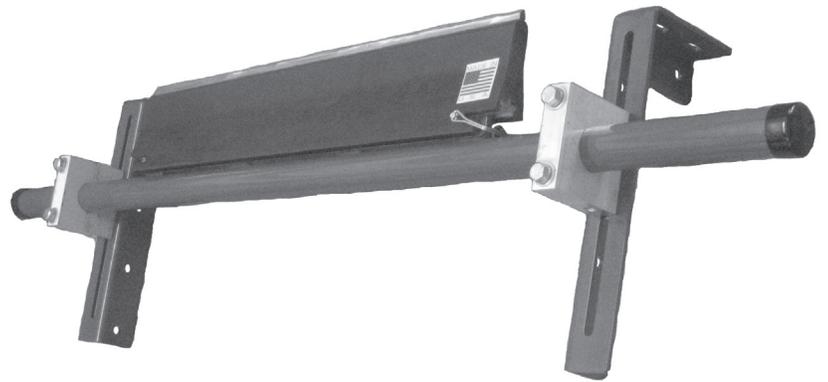


IT'S THE YEAR OF  
**INNOVATION**  
AT AMERICAN EAGLE  
MANUFACTURING



# **E7SC**

## **INSTRUCTION MANUAL**

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FACILITY NAME

---

CONVEYOR NUMBER

---

DATE OF INSTALLATION

---

INSTALLED BY

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# DISCLAIMER/SAFETY

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## 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.

## 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.



# INSTALLATION CHECK LIST

---

## 4.1 Confirmation of Cleaner Series and Size

- A) Confirm belt width.
- B) Mechanical splice - 2 blade options. (urethane blade/AR blade tip)
- C) Vulcanized splice -3 blade options. (urethane blade/AR blade tip/carbide blade tip)
- D) Necessary accessories for proper installation. (see page 5)

## 4.2 Non-Chute installation

- A) Confirm location of bracket on chute.
- B) Pre-check any obstructions for proper location.
- C) You will need to purchase our mounting bracket on page 5 or fabricate a bracket to mount the cleaner for proper blade height adjustment.
- D) Confirm tensioning position - standard location of spring is on top of bracket.  
If tensioning spring needs to be located on bottom of bracket, please see page 5 for bottom mounting bracket.
- E) Confirm Standard mounting tube length is adequate (see page 6 item 2)

## 4.3 Tools Required

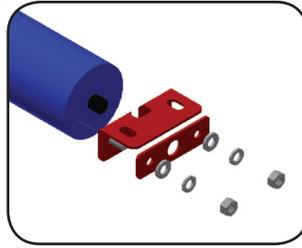
Personal safety equipment as required by OSHA/MSHA and site specific guidelines.

Standard hand tools, cutting torch, welder, grinder, soap stone or marker and fire protection.

# SECONDARY CLEANER ACCESSORIES

## Hold Down Roller

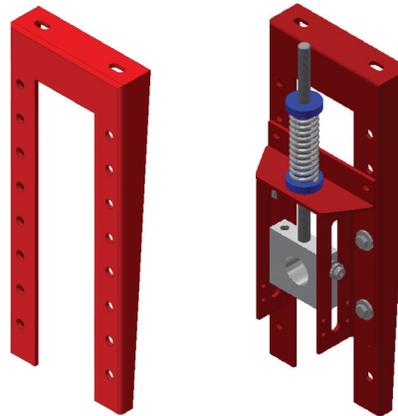
A hold down roller is required when the belt is cupping off the head pulley or when the secondary cleaner is over 10" from head pulley.



| Belt Width | 5" Roller with Brackets | 6" Roller with Brackets |
|------------|-------------------------|-------------------------|
| 24"        | EHDR5-24                | EHDR6-24                |
| 30"        | EHDR5-30                | EHDR6-30                |
| 36"        | EHDR5-36                | EHDR6-36                |
| 42"        | EHDR5-42                | EHDR6-42                |
| 48"        | EHDR5-48                | EHDR6-48                |
| 54"        | EHDR5-54                | EHDR6-54                |
| 60"        | EHDR5-60                | EHDR6-60                |
| 72"        | EHDR5-72                | EHDR6-72                |

## Mounting Bracket for E8 Series

Our mounting bracket will allow you to mount our E8SC series belt cleaner in an area where there is no chute wall or where more room is required for proper belt cleaner installation.



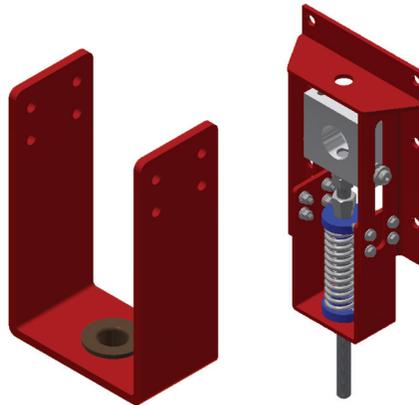
| Part Number | Size |
|-------------|------|
| E8SCMB24    | 24"  |

(set of 2)

E8SC Belt Cleaner not included

## Bottom Mounting Bracket for E8 Series

Our bottom mounting bracket is designed to retrofit an existing E8SC series belt cleaner to be tensioned from the bottom.



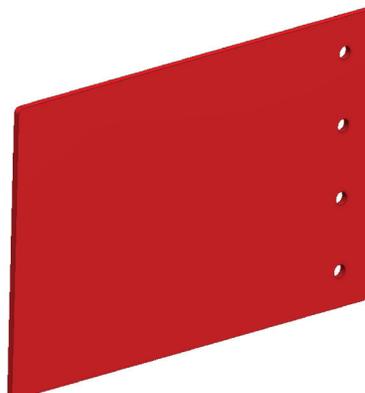
| Part Number | Size |
|-------------|------|
| E8SCBMB     | 8"   |

(set of 2)

E8SC Belt Cleaner not included

## Eagle Mounting Plate or Chute Patch

This low cost Mounting Plate provides easy installation of primary cleaners without chute walls. It also can be used as a chute patch for new installation of primary or secondary cleaners.

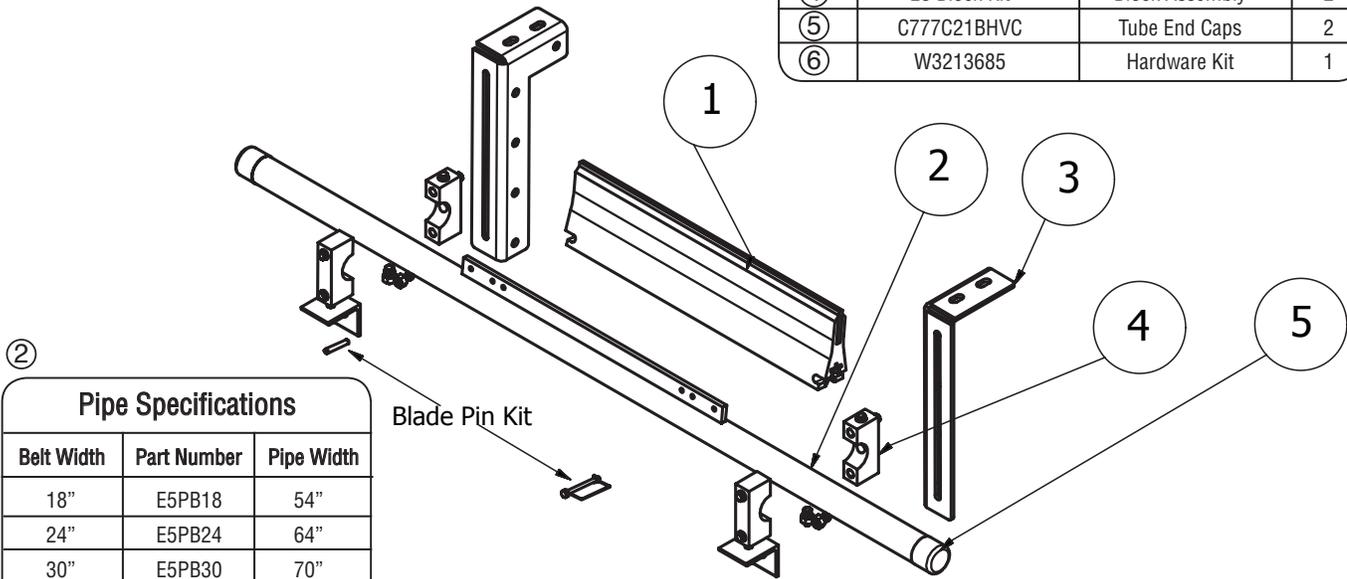


| Part Number | Size    |
|-------------|---------|
| EMP1218     | 12"x18" |

(set of 2)

# E7SC REPLACEMENT PARTS

| Parts List |              |                  |      |
|------------|--------------|------------------|------|
| Num.       | Part Number  | Description      | Qty. |
| ①          | SC-x-xx-xx   | Blade            | 1    |
| ②          | E5PBxx       | Mounting Tube    | 1    |
| ③          | E7 MB Kit    | Mounting Bracket | 2    |
| ④          | E8 Block Kit | Block Assembly   | 2    |
| ⑤          | C777C21BHVC  | Tube End Caps    | 2    |
| ⑥          | W3213685     | Hardware Kit     | 1    |



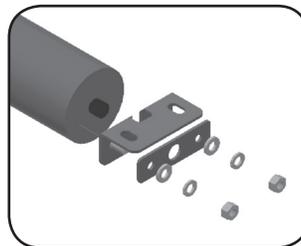
②

| Pipe Specifications |             |            |
|---------------------|-------------|------------|
| Belt Width          | Part Number | Pipe Width |
| 18"                 | E5PB18      | 54"        |
| 24"                 | E5PB24      | 64"        |
| 30"                 | E5PB30      | 70"        |
| 36"                 | E5PB36      | 76"        |
| 42"                 | E5PB42      | 82"        |
| 48"                 | E5PB48      | 88"        |
| 54"                 | E5PB54      | 94"        |
| 60"                 | E5PB60      | 100"       |
| 72"                 | E5PB72      | 112"       |

# E7SC ACCESSORY PARTS

## Hold Down Roller

A hold down roller is required when the belt is cupping off the head pulley or when the secondary cleaner is over 10" from head pulley.



| Belt Width | 5" Roller with Brackets | 6" Roller with Brackets |
|------------|-------------------------|-------------------------|
| 24"        | EHDR5-24                | EHDR6-24                |
| 30"        | EHDR5-30                | EHDR6-30                |
| 36"        | EHDR5-36                | EHDR6-36                |
| 42"        | EHDR5-42                | EHDR6-42                |
| 48"        | EHDR5-48                | EHDR6-48                |
| 54"        | EHDR5-54                | EHDR6-54                |
| 60"        | EHDR5-60                | EHDR6-60                |
| 72"        | EHDR5-72                | EHDR6-72                |

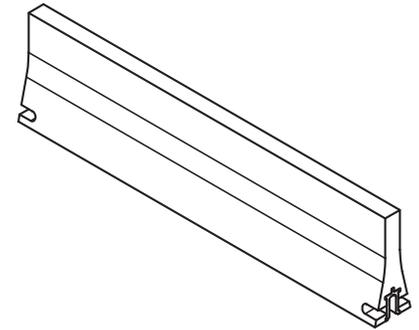


Note: Accessory parts are not included with cleaner.

# SECONDARY REPLACEMENT BLADES

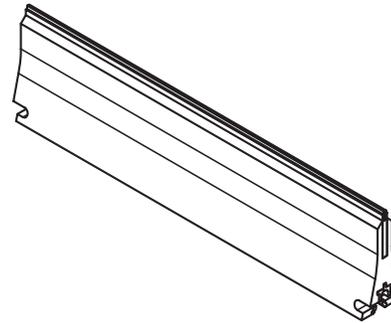
## Urethane Blade Specifications

| Belt Width | Blue Ev-R-Wear High Performance | Orange, Standard Economy Blade | Green Chemical Resistant | Red High Heat (Max. 275°F) | White FDA Compliant |
|------------|---------------------------------|--------------------------------|--------------------------|----------------------------|---------------------|
| 18"        | SC-M-UR-18                      | SC-U-UR-18                     | SC-C-UR-18               | SC-H-UR-18                 | SC-W-UR-18          |
| 24"        | SC-M-UR-24                      | SC-U-UR-24                     | SC-C-UR-24               | SC-H-UR-24                 | SC-W-UR-24          |
| 30"        | SC-M-UR-30                      | SC-U-UR-30                     | SC-C-UR-30               | SC-H-UR-30                 | SC-W-UR-30          |
| 36"        | SC-M-UR-36                      | SC-U-UR-36                     | SC-C-UR-36               | SC-H-UR-36                 | SC-W-UR-36          |
| 42"        | SC-M-UR-42                      | SC-U-UR-42                     | SC-C-UR-42               | SC-H-UR-42                 | SC-W-UR-42          |
| 48"        | SC-M-UR-48                      | SC-U-UR-48                     | SC-C-UR-48               | SC-H-UR-48                 | SC-W-UR-48          |
| 54"        | SC-M-UR-54                      | SC-U-UR-54                     | SC-C-UR-54               | SC-H-UR-54                 | SC-W-UR-54          |
| 60"        | SC-M-UR-60                      | SC-U-UR-60                     | SC-C-UR-60               | SC-H-UR-60                 | SC-W-UR-60          |
| 72"        | SC-M-UR-72                      | SC-U-UR-72                     | SC-C-UR-72               | SC-H-UR-72                 | SC-W-UR-72          |



## Carbide Blade Tip Specifications

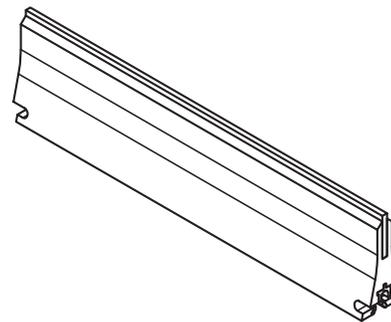
| Belt Width | Blue Ev-R-Wear High Performance | Green Chemical Resistant | Red High Heat (Max. 275°F) |
|------------|---------------------------------|--------------------------|----------------------------|
| 18"        | SC-M-GC-18                      | SC-C-GC-18               | SC-H-GC-18                 |
| 24"        | SC-M-GC-24                      | SC-C-GC-24               | SC-H-GC-24                 |
| 30"        | SC-M-GC-30                      | SC-C-GC-30               | SC-H-GC-30                 |
| 36"        | SC-M-GC-36                      | SC-C-GC-36               | SC-H-GC-36                 |
| 42"        | SC-M-GC-42                      | SC-C-GC-42               | SC-H-GC-42                 |
| 48"        | SC-M-GC-48                      | SC-C-GC-48               | SC-H-GC-48                 |
| 54"        | SC-M-GC-54                      | SC-C-GC-54               | SC-H-GC-54                 |
| 60"        | SC-M-GC-60                      | SC-C-GC-60               | SC-H-GC-60                 |
| 72"        | SC-M-GC-72                      | SC-C-GC-72               | SC-H-GC-72                 |



Not Recommend for Mechanical Splices

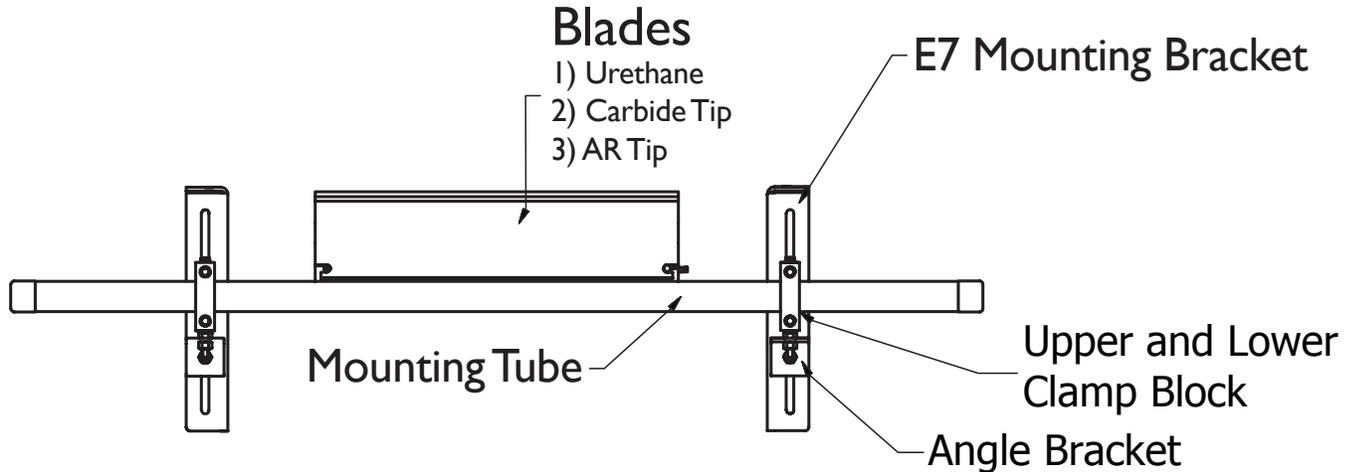
## AR Blade Tip Specifications

| Belt Width | Blue Ev-R-Wear High Performance | Green Chemical Resistant | Red High Heat (Max. 275°F) |
|------------|---------------------------------|--------------------------|----------------------------|
| 18"        | SC-M-AR-18                      | SC-C-AR-18               | SC-H-AR-18                 |
| 24"        | SC-M-AR-24                      | SC-C-AR-24               | SC-H-AR-24                 |
| 30"        | SC-M-AR-30                      | SC-C-AR-30               | SC-H-AR-30                 |
| 36"        | SC-M-AR-36                      | SC-C-AR-36               | SC-H-AR-36                 |
| 42"        | SC-M-AR-42                      | SC-C-AR-42               | SC-H-AR-42                 |
| 48"        | SC-M-AR-48                      | SC-C-AR-48               | SC-H-AR-48                 |
| 54"        | SC-M-AR-54                      | SC-C-AR-54               | SC-H-AR-54                 |
| 60"        | SC-M-AR-60                      | SC-C-AR-60               | SC-H-AR-60                 |
| 72"        | SC-M-AR-72                      | SC-C-AR-72               | SC-H-AR-72                 |



Not Recommend for Mechanical Splices

# E7SC INSTALLATION INSTRUCTIONS

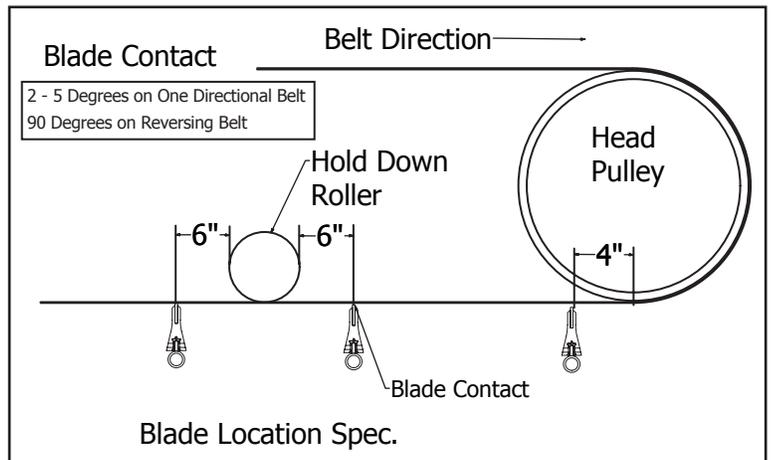


**\*IMPORTANT MAKE SURE CONVEYOR IS LOCKED OUT AND TAGGED OUT BEFORE ANY WORK BEGINS**

## Step 1.

**Location** - It is preferred to install the Cleaner with Blade contact 4" from the point where belt leaves the Head Pulley (see Blade Location Spec. Diagram). If no room is available, move Cleaner further back.

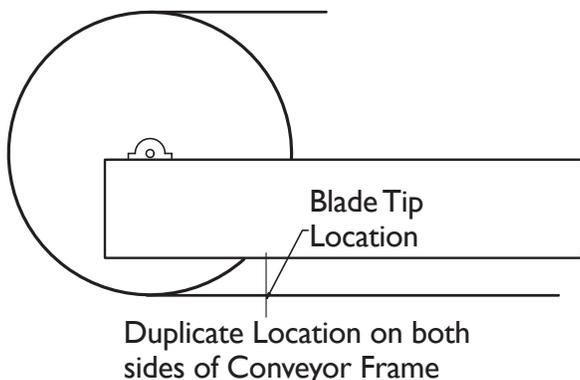
**Note:** A hold-down roller is recommended to insure the belt is flat (no cupping) to achieve optimum cleaning.



## Step 2.

### MOUNTING BRACKET INSTALLATION TO CONVEYOR FRAME

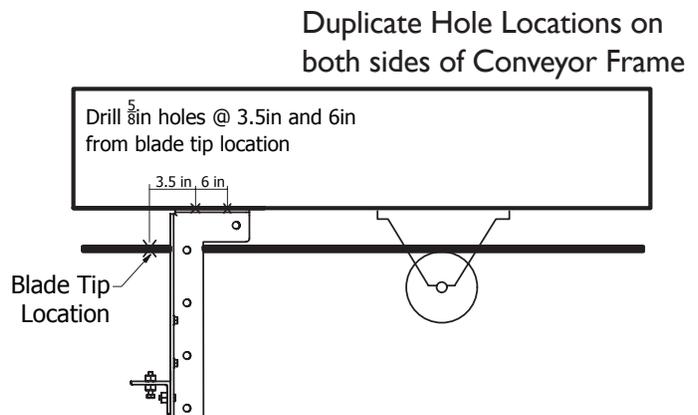
Draw a blade location line on the belt and transfer line to conveyor frame as shown in diagram below.



## Step 3.

### MOUNTING BRACKET HOLE LOCATIONS

You will need to measure and mark both hole locations for mounting brackets. (see diagram below for dimensions)



# E7SC INSTALLATION INSTRUCTIONS

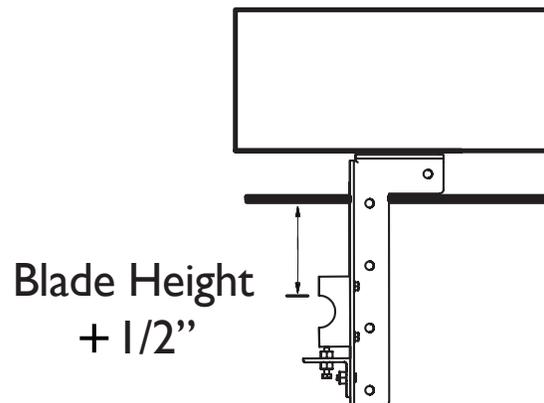
## Step 4.

### ATTACHING MOUNTING BLOCK TO BRACKET

1) First measure your overall blade height



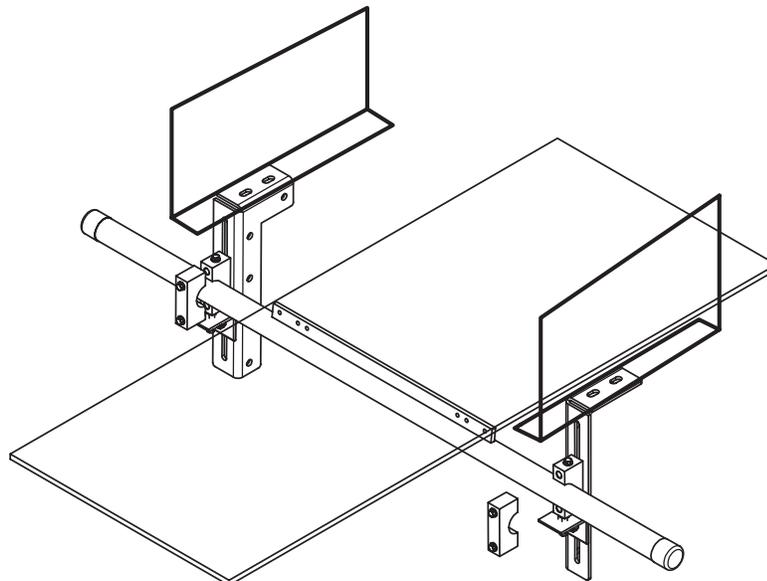
2) Measure distance from bottom of belt to top of radius as shown in the diagram, using the blade height + 1/2". (This will assist in getting the blade location close for final adjustment.)



## Step 5.

### ATTACHING THE MOUNTING POLE TO THE CLAMP BLOCKS

We recommend the second half to the clamp block on one side with a gap as shown in the picture. This will let you rest the mounting pole on one side as you attach the second side of the clamp block to the other side.



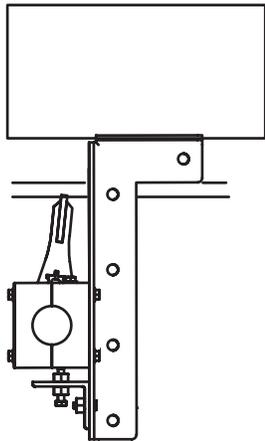
# E7SC INSTALLATION INSTRUCTIONS

## Step 6.

Attach blade to mounting tube.

Tighten clamp block around mounting tube so you can still rotate mounting tube with blade to proper angle. Blade should be at an angle negative the belt direction by 2-5 degrees.

Make sure blade is in the center of the belt path. Then tighten clamp blocks once everything is aligned.



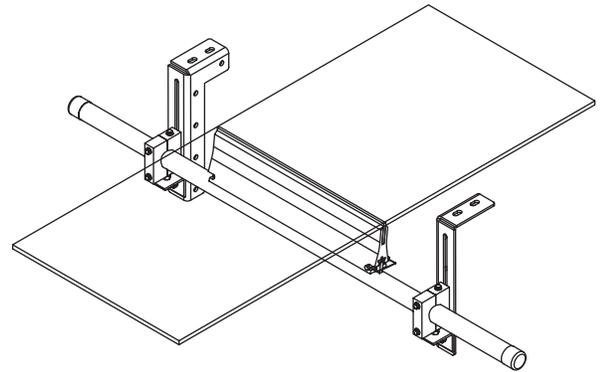
**Belt Path**



2-5 Degree  
Setting the Blade  
Angle is Critical



**Caution**



## ADJUSTING BLADE TENSION

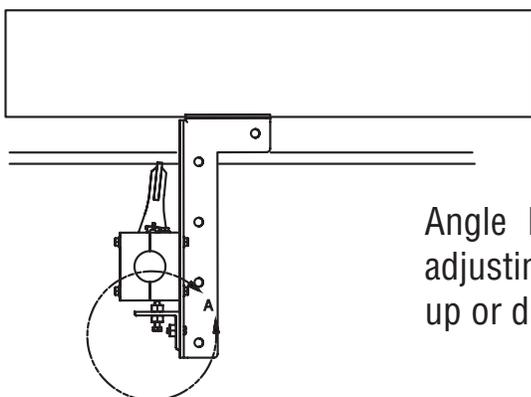
### Step 7.

Adjusting blade tension using the angle bracket adjustment bolt. Adjust on both sides of cleaner until blade touches belt equally on both sides. Then adjust tension for the type blade being installed

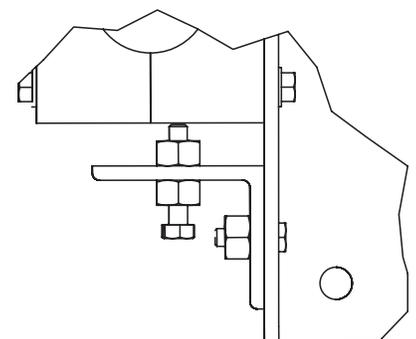
Urethane Blade - 1/4" to 3/8"

Carbide Tip and AR Tip blades - 1/8" Only

*If there is no contact of blade in the center of belt, use a hold down roller to create even pressure across belt. (See Step 1)*



Angle Bracket is used to aid in adjusting Mounting Tube with Blade up or down for correct tensioning.



DETAIL A  
SCALE .75



Caution

Carbide Tip and AR Tip Blades, DO NOT OVER TENSION.



Caution

Carbide Tip Blades are NOT RECOMMENDED WITH MECHANICAL SPLICES.

## Step 8.

Once everything is at proper tension, make sure to tighten all bolts on both sides of the clamp block along with jam nuts on the angle brackets.

## Step 9.

**TEST RUN THE CLEANER.** Make sure that there is full coverage of belt with Blade and full Blade contact. If vibration occurs or cleaning is insufficient, adjust Blade tension on both sides at 1/16” increments.

---

## NOTES:

# MAINTENANCE

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## 1) INSTALLATION INSPECTION

After the cleaner has been installed and run for several days, a visual inspection should be made to ensure proper cleaning, at this time make any needed adjustments. Recheck all fasteners on mounting. Routine inspections.

## 2) VISUAL INSPECTIONS ON A REGULAR BASIS EVERY FOUR WEEKS

Check for cleaner performance. Checking tension. Material build up on blade or transfer area (check tension), wash down transfer chute and blade. Check belt for any damage areas or splice damage.

## 3) BLADE ADJUSTMENT

Inspect blade contact to belt for optimal cleaning. Check for correct tension settings and guidelines.

# TROUBLESHOOTING

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|                              |   |
|------------------------------|---|
| VIBRATION                    | <ol style="list-style-type: none"><li>1) Cleaner tension too high (set tension as listed in installation)</li><li>2) Cleaner tension too low (set tension as listed in installation)</li><li>3) Belt tension too high</li><li>4) Improper installation of cleaner</li><li>5) Blade worn (replace blade)</li></ol> |
| BLADE NOT CONFORMING TO BELT | <ol style="list-style-type: none"><li>1) Improper installation of cleaner</li><li>2) Blade angle incorrect (make sure there is equal tension on both sides of the cleaner)</li><li>3) Belt cupped (install hold down roller to flatten belt)</li></ol>  |
| DAMAGED BELT COVER           | <ol style="list-style-type: none"><li>1) Cleaner tension too high (set tension as listed in installation)</li><li>2) Blade angle incorrect (make sure there is equal tension on both sides of the cleaner)</li><li>3) Blade damage (Replace blade)</li></ol>  |
| DAMAGE TO MECHANICAL SPLICE  | <ol style="list-style-type: none"><li>1) Incorrect blade selection</li><li>2) Blade angle incorrect</li><li>3) Belt not skived correctly</li></ol>  |



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