

IT'S THE YEAR OF
INNOVATION
AT AMERICAN EAGLE
MANUFACTURING



NS7SC

INSTRUCTION MANUAL

FACILITY NAME

CONVEYOR NUMBER

DATE OF INSTALLATION

INSTALLED BY

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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.

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 Chute installation

- A) Confirm location of bracket on chute.
- B) Pre-check any obstructions for proper location.
- C) 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.
- D) Confirm Standard mounting tube length is adequate (see page 6 item 2)

4.3 Tools Required

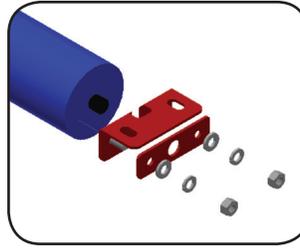
Personal safety equipment as required by OSHA/MSHA and site specific guidelines.

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

SECONDARY CLEANER ACCESSORIES

Hold Down Roller

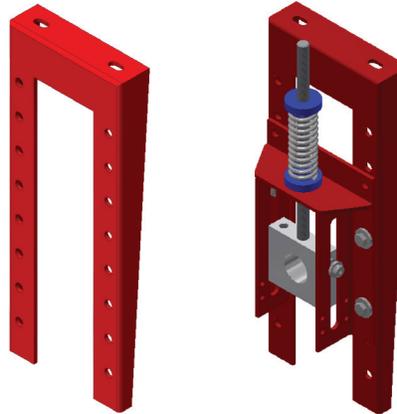
A hold down roller is required when the belt is cupping off the head pulley or when the secondary cleaner is over 10" from head pulley.



| 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.



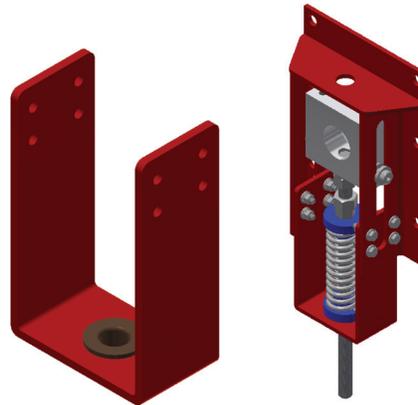
| Part Number | Size |
|-------------|------|
| E8SCMB24 | 24" |

(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.



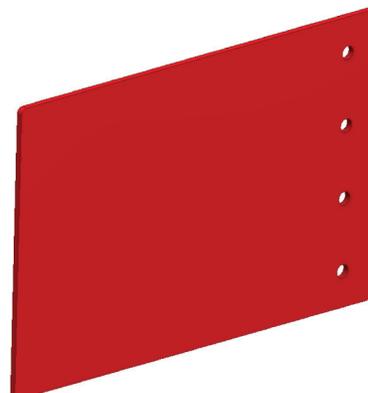
| Part Number | Size |
|-------------|------|
| E8SCBMB | 8" |

(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.

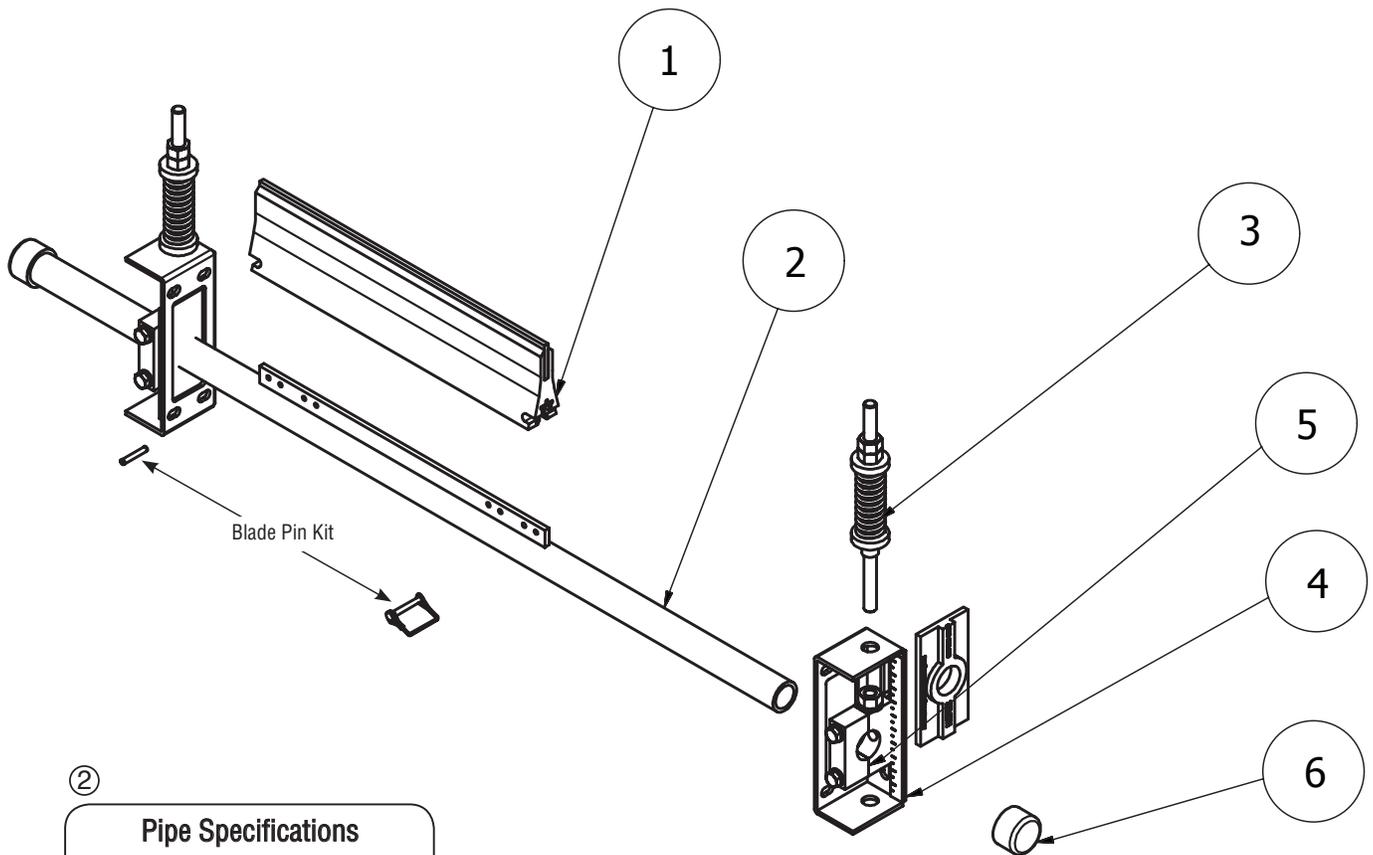


| Part Number | Size |
|-------------|---------|
| EMP1218 | 12"x18" |

(set of 2)

NS7SC REPLACEMENT PARTS

| Parts List | | | |
|------------|---------------|-----------------------|------|
| Num. | Part Number | Description | Qty. |
| ① | SC-x-xx-xx | Blade | 1 |
| ② | E5PBxx | Mounting Tube | 1 |
| ③ | E8 Spring Kit | E8 Spring Kit and Rod | 2 |
| ④ | NS7MB Kit | Mounting Bracket | 2 |
| ⑤ | NS7 Block Kit | Block Assembly | 2 |
| ⑥ | C777C21BHVC | Tube End Caps | 2 |
| ⑦ | W3213685 | Hardware Kit | 1 |



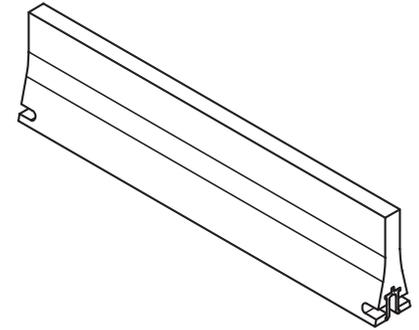
②

| 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" |

SECONDARY REPLACEMENT BLADES

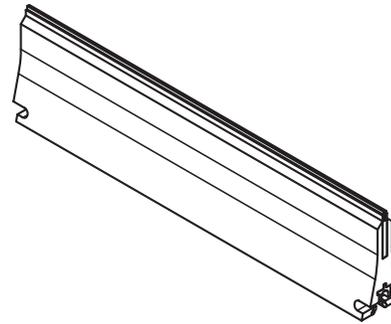
Urethane Blade Specifications

| 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

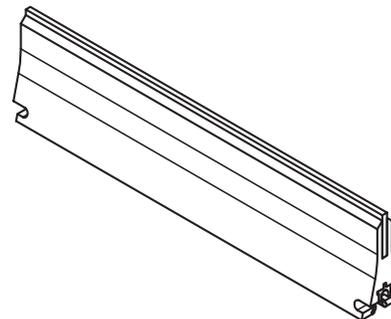
| Belt Width | Blue Ev-R-Wear High Performance | Green Chemical Resistant | Red High Heat (Max. 275°F) |
|------------|---------------------------------|--------------------------|----------------------------|
| 18" | SC-M-GC-18 | SC-C-GC-18 | SC-H-GC-18 |
| 24" | SC-M-GC-24 | SC-C-GC-24 | SC-H-GC-24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

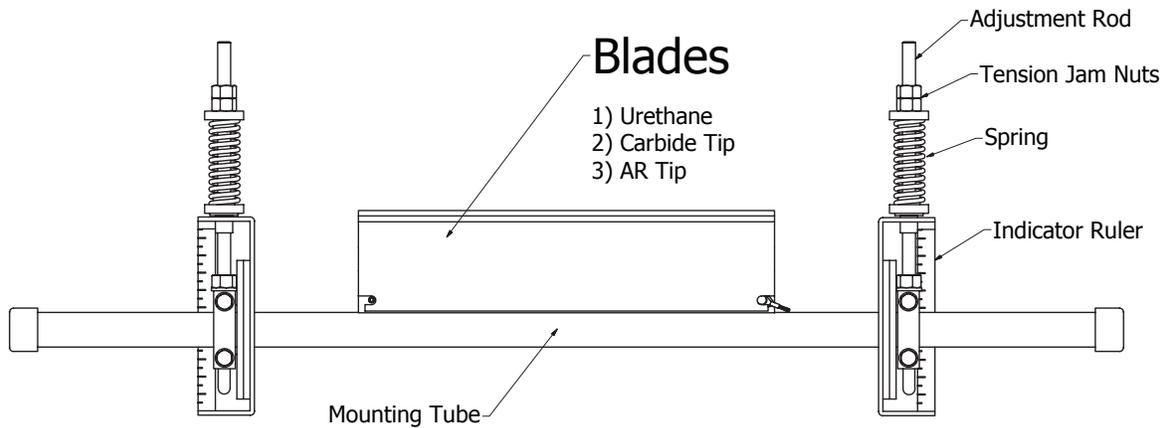
AR Blade Tip Specifications

| 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

NS7SC INSTALLATION INSTRUCTIONS

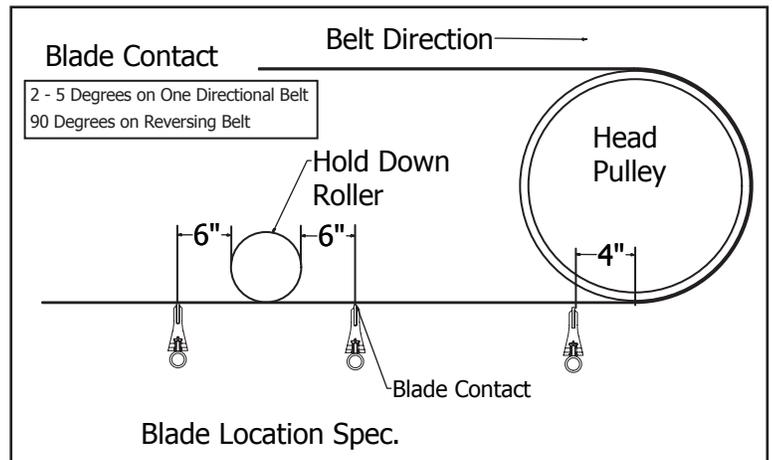


***IMPORTANT MAKE SURE CONVEYOR IS LOCKED OUT AND TAGGED OUT BEFORE ANY WORK BEGINS**

Step 1.

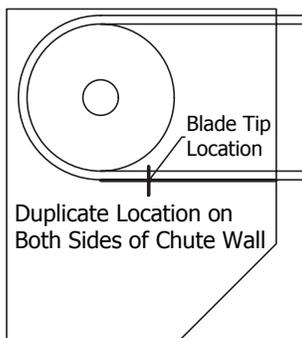
Location - It is preferred to install the Cleaner with Blade contact 4" from the point where belt leaves the Head Pulley (see Blade Location Spec. Diagram). If no room is available, move Cleaner further back.

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



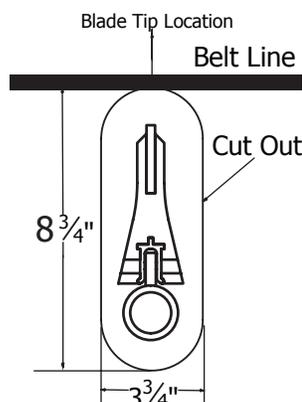
Step 2.

MOUNTING BRACKET INSTALLATION TO CHUTE WALL
Draw a belt location line on the chute wall. Then mark blade tip location intersection on chute wall. This must be done identically on both sides.



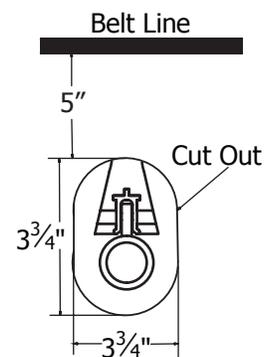
Step 3.

BLADE & TUBE ACCESS HOLE
You will need to cut a hole to accommodate both the tube and blade on one side. Cut a hole as shown on the diagram.



Step 4.

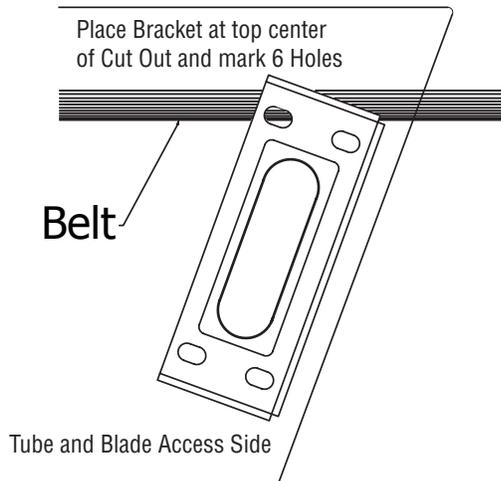
TUBE ACCESS HOLE
For tube adjustment hole you have two options: A) cut same size as Step 3 or B) cut a smaller hole to accommodate tube adjustment only.



NS75C INSTALLATION INSTRUCTIONS

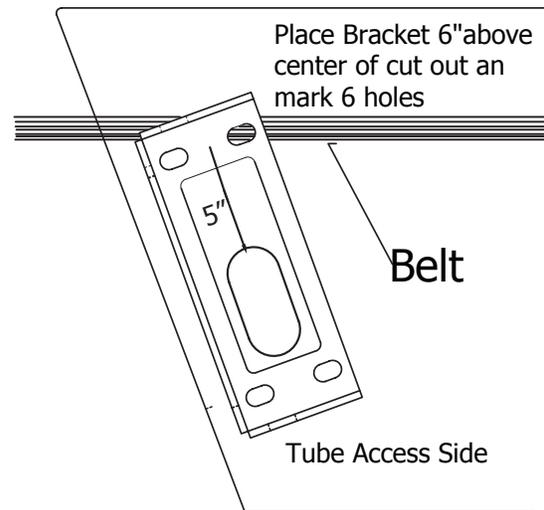
Step 5.

Hold bracket on chute wall for hole marking. Remove bracket and drill or burn holes as per diagram.



Step 6.

Mark 6" above hole and hold bracket on chute wall for hole marking. Remove bracket and drill or burn holes as per diagram.

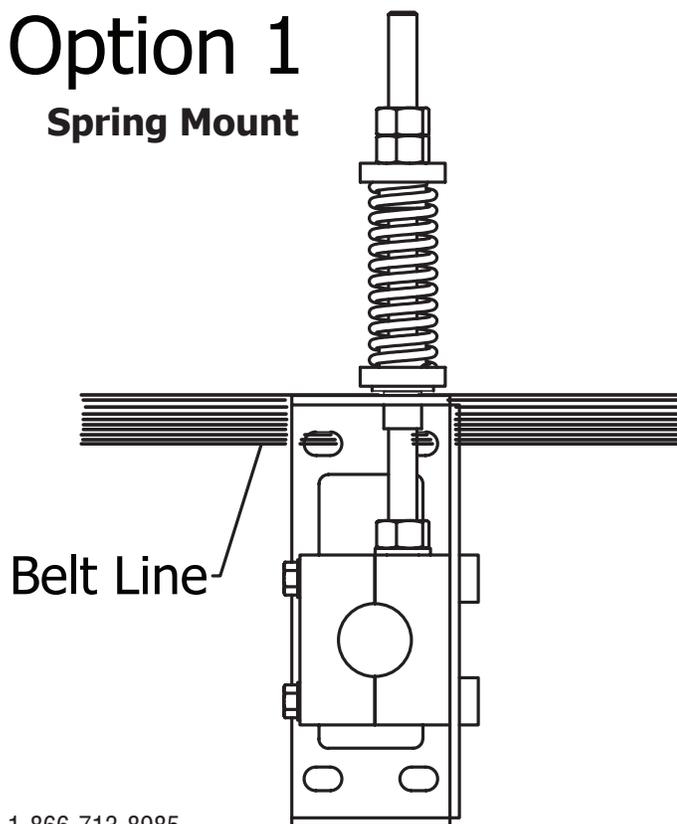


Step 7.

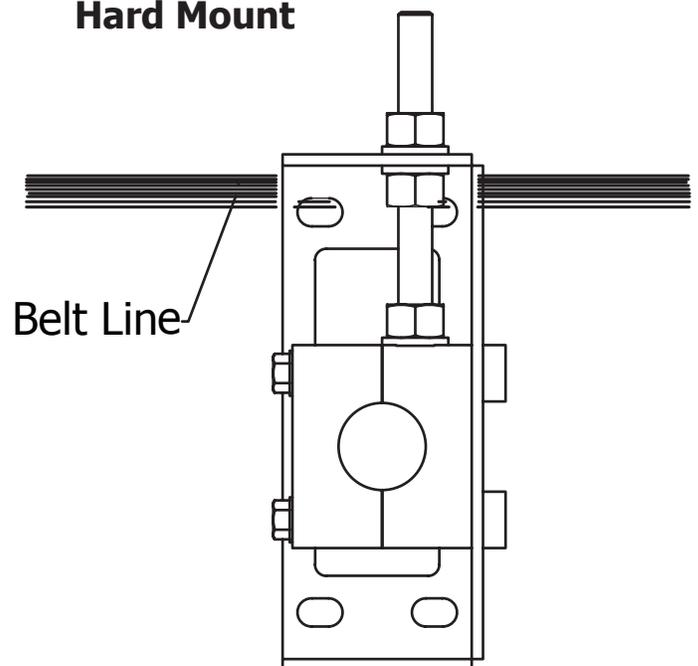
BRACKET MOUNTING OPTIONS:

After bolting the mounting brackets to the chute wall, choose the option below that better suits for tensioning access.

Option 1 Spring Mount



Option 2 Hard Mount



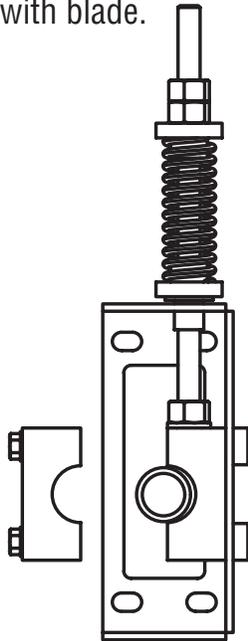
NS7SC INSTALLATION INSTRUCTIONS

Step 8.

Remove bottom clamp block to install mounting tube with blade.

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.

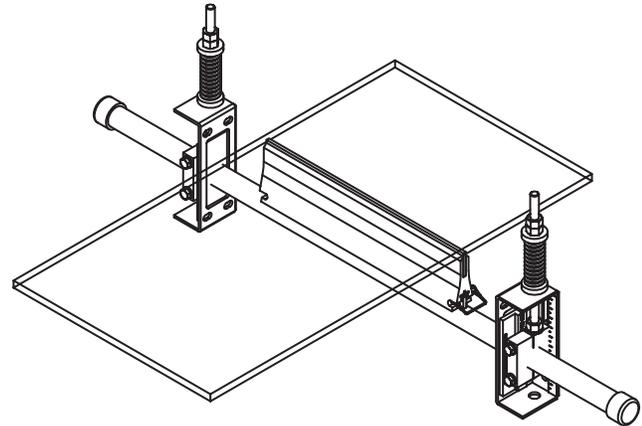
Make sure blade is in the center of the belt path. Then tighten clamp blocks once everything is aligned.



2-5 Degree
Setting the Blade
Angle is Critical!



Caution

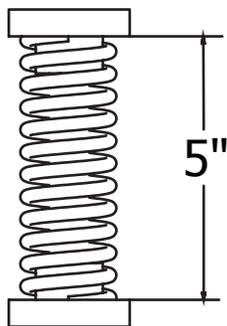


Step 9.

SETTING THE BLADE TENSION FOR OPTION 1

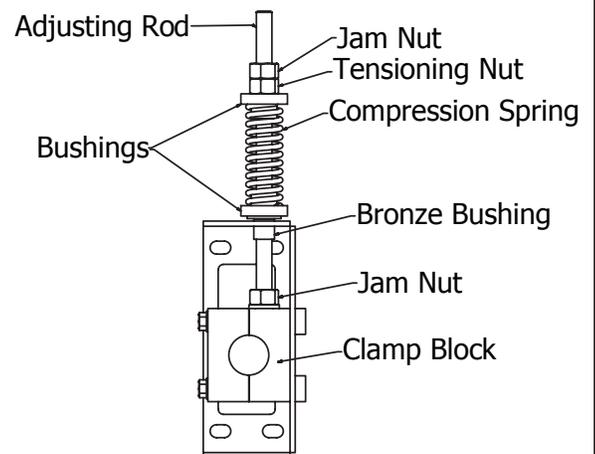
Loosen the top jam nuts on adjustment rods on both sides. Turn tensioning nut to bring blade tip to touch the belt equally on both sides. Then use our spring compression chart to determine the correct compression of spring for the blade type.

COMPRESSION SPRING



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

Option 1 Spring Mount



Caution

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



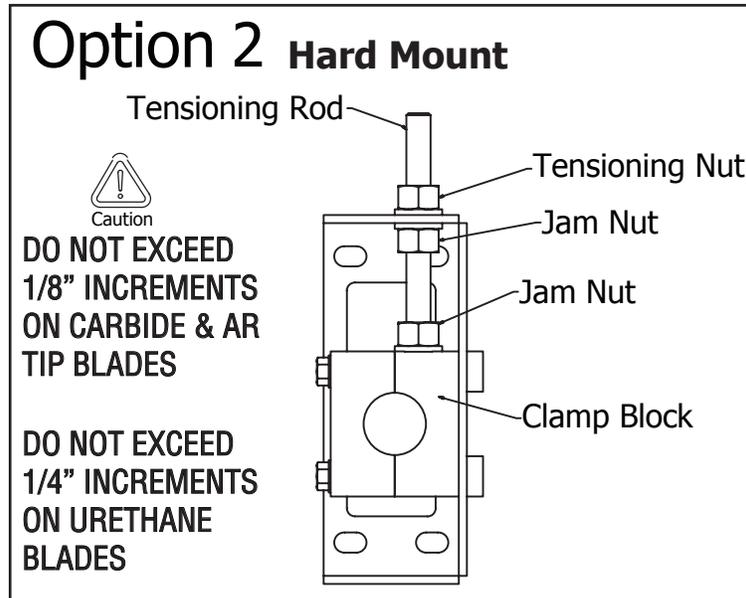
Caution

Carbide Tip Blades are NOT RECOMMENDED WITH MECHANICAL SPLICES.

NS75C INSTALLATION INSTRUCTIONS

SETTING THE BLADE TENSION FOR OPTION 2

Loosen the bottom jam nuts on adjustment rods on both sides. Turn tensioning nut to bring blade tip to touch the belt equally on both sides. Using the indicator ruler, adjust the tension (equally on both sides) no more than 1/8" for carbide- or AR-tipped blades. For urethane blades, adjust no more than 1/4" on both sides.



Caution

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



Caution

Carbide Tip Blades are NOT RECOMMENDED WITH MECHANICAL SPLICES.

Step 10.

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 by compressing the Tension Spring on both sides at 1/16" increments.

MAINTENANCE

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

| | |
|------------------------------|---|
| VIBRATION | <ol style="list-style-type: none">1) Cleaner tension too high (set tension as listed in installation)2) Cleaner tension too low (set tension as listed in installation)3) Belt tension too high4) Improper installation of cleaner5) Blade worn (replace blade) |
| BLADE NOT CONFORMING TO BELT | <ol style="list-style-type: none">1) Improper installation of cleaner2) Blade angle incorrect (make sure there is equal tension on both sides of the cleaner)3) Belt cupped (install hold down roller to flatten belt) |
| DAMAGED BELT COVER | <ol style="list-style-type: none">1) Cleaner tension too high (set tension as listed in installation)2) Blade angle incorrect (make sure there is equal tension on both sides of the cleaner)3) Blade damage (Replace blade) |
| DAMAGE TO MECHANICAL SPLICE | <ol style="list-style-type: none">1) Incorrect blade selection2) Blade angle incorrect3) Belt not skived correctly |

American Eagle Manufacturing LLC

1 866 713 8985

252 633 0603

New Bern, North Carolina 28562

AmericanEagleManufacturing.com

