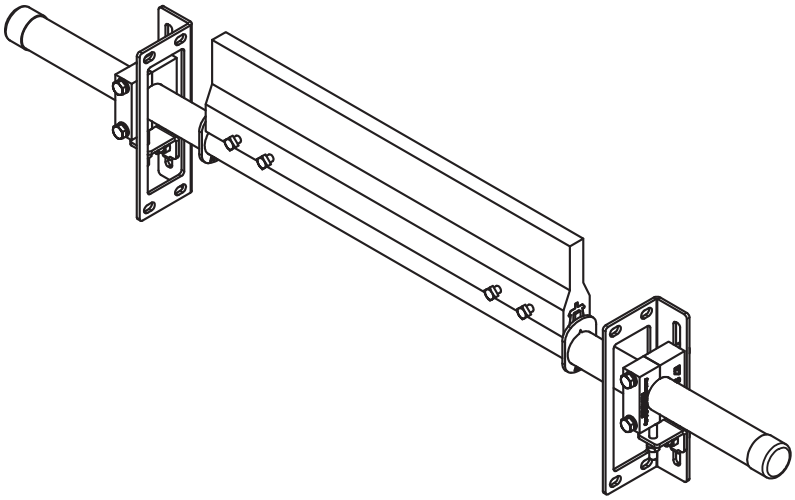
IT'S A NEW ERA OF
INNOVATION
AT AMERICAN EAGLE
MANUFACTURING

AMERICAN EAGLE MANUFACTURING LLC



NS7SC SERIES
INSTRUCTION MANUAL

UNI-BLADE™
PATENT NO. 12246927

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.

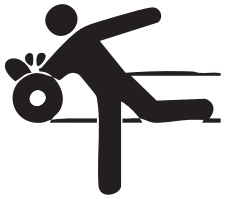
3.2 Safety

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

- DANGER -

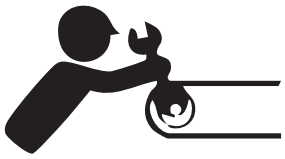
Lockout/Tagout procedures must be followed before any maintenance, service, repair, or installation of equipment begins on the conveyor. Failure to follow all safety rules can result in injury or death.

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.

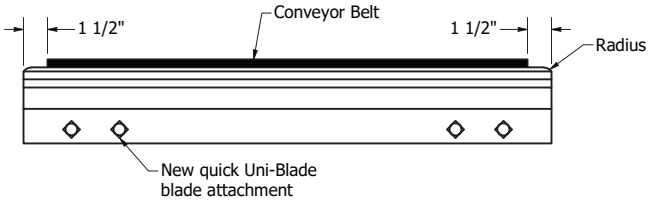
If the cleaner assembly doesn't account for the same variation and movement, you're running a high risk of your belt not being cleaned across the full width. Belt-width secondary cleaners didn't leave the same room for error that the return roller was designed for. So, after years of evaluation, we decided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

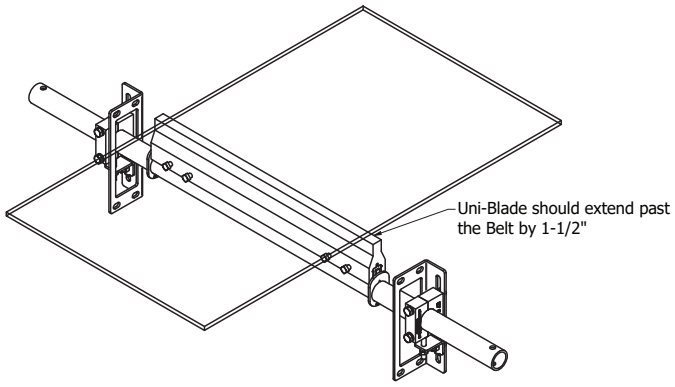
What about the carbide with the rounded corners?

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?

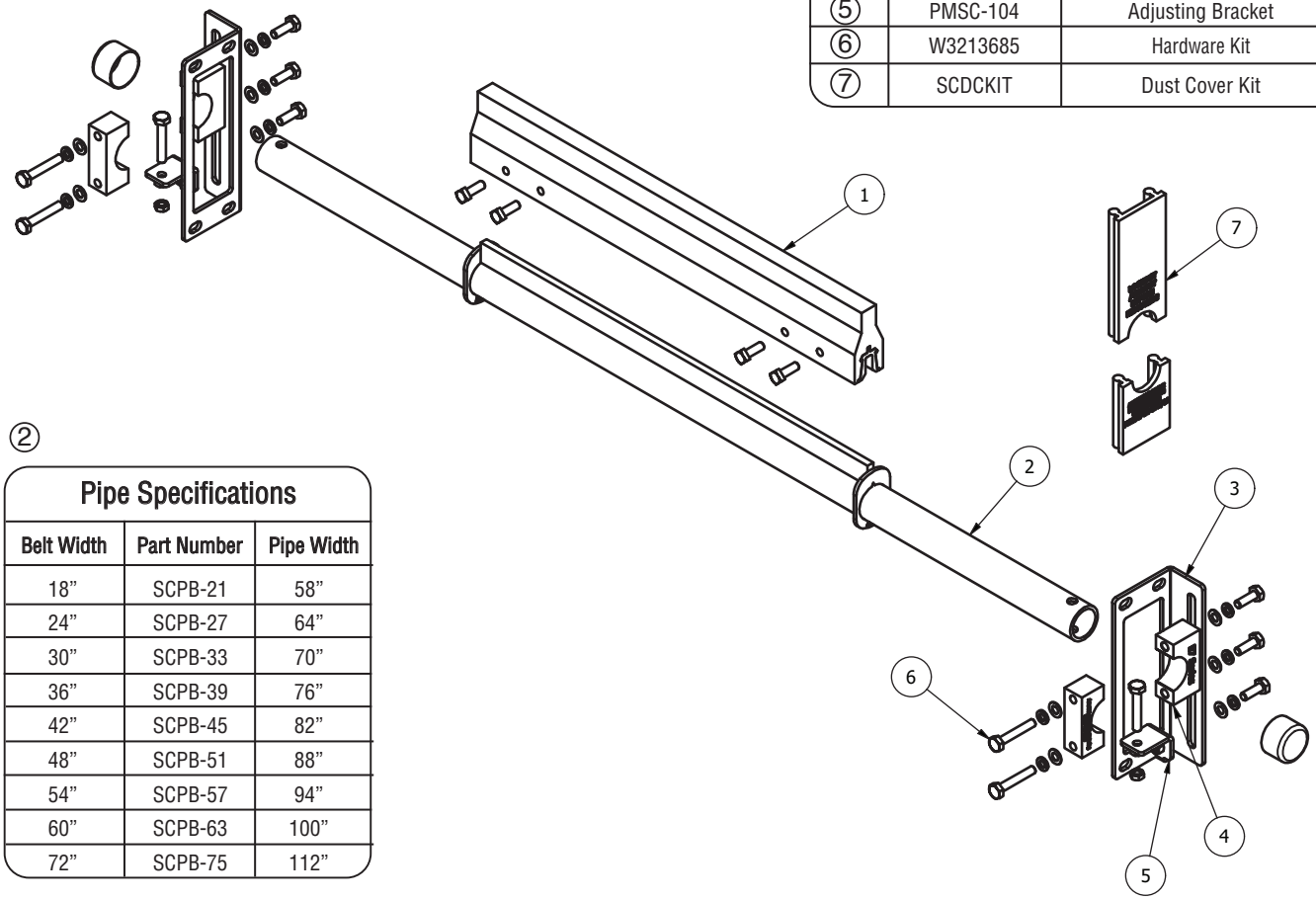
Regardless of OEM, the blade will simply drop onto the bar. Tighten the four included bolts after confirming placement, and the blade is installed. We really wish there were more words, but unfortunately, it's that simple.





NS7SC5 SECONDARY REPLACEMENT PARTS

Parts List			
Num.	Part Number	Description	Qty.
①	SC5xxxxx	5” Secondary Blade	1
②	SCPB-xx	Secondary Pipe & Bar Assy	1
③	NS7SCMB	NS7 Mounting Bracket	2
④	E7 Block Kit	Clamp Block Kit	2
⑤	PMSC-104	Adjusting Bracket	2
⑥	W3213685	Hardware Kit	2
⑦	SCDCKIT	Dust Cover Kit	2



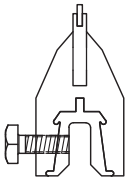
②

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

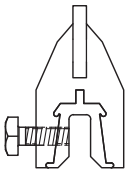
Belt Width	+3 Blade Width	AEM Part Number	Weight
24”	27”	SC5MUR27	13.5 lbs.
30”	33”	SC5MUR33	15 lbs.
36”	39”	SC5MUR39	19 lbs.
42”	45”	SC5MUR45	22 lbs.
48”	51”	SC5MUR51	25 lbs.
54”	57”	SC5MUR57	28 lbs.
60”	63”	SC5MUR63	31 lbs.
66”	69”	SC5MUR69	32.5 lbs.
72”	75”	SC5MUR75	35.5 lbs.
84”	87”	SC5MUR87	42.5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

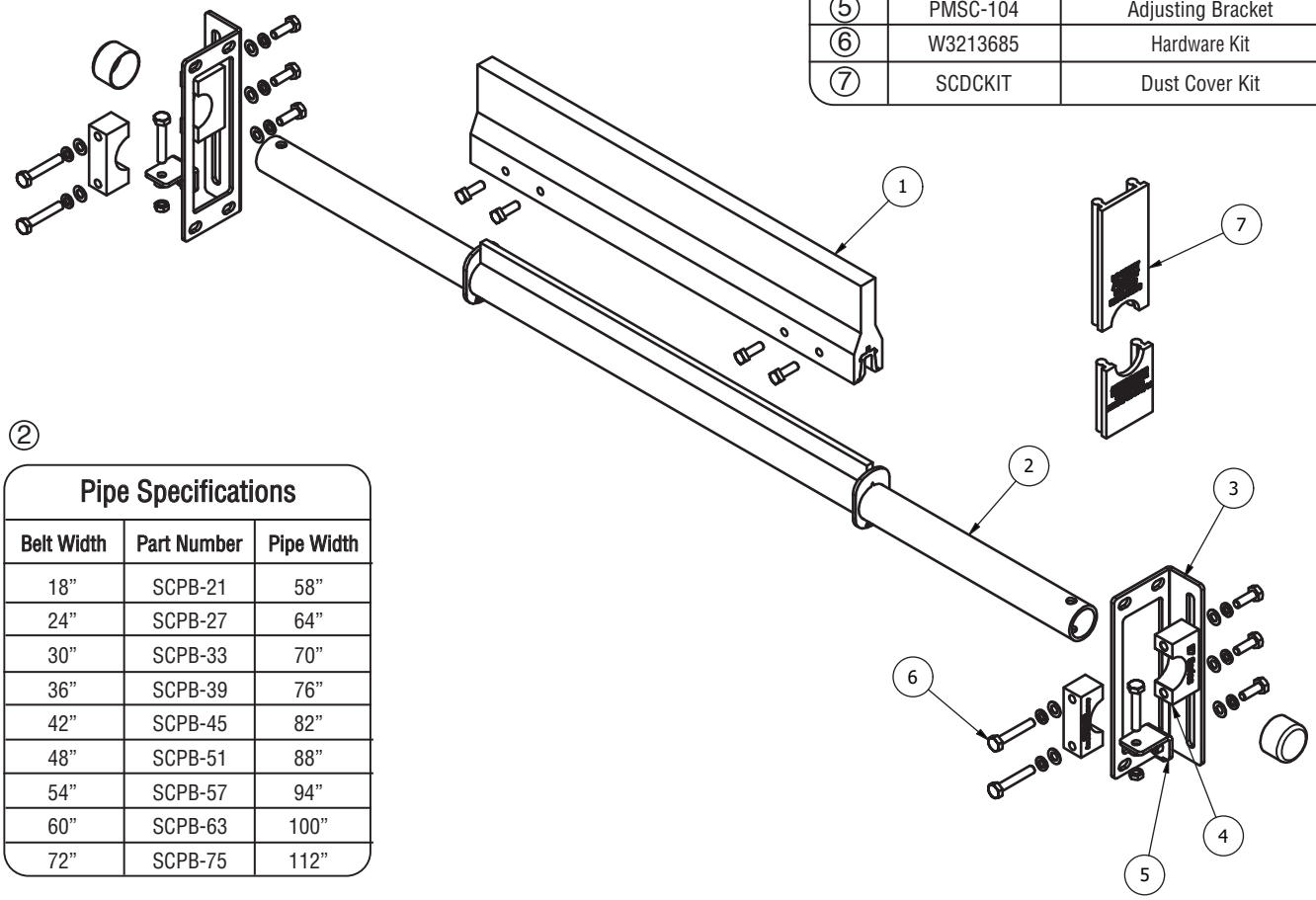
AR BLADE



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.

NS7SC7 SECONDARY REPLACEMENT PARTS

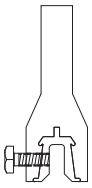
Parts List			
Num.	Part Number	Description	Qty.
①	SC7xxxxx	7" Secondary Blade	1
②	SCPB-xx	Secondary Pipe & Bar Assy	1
③	NS7SCMB	NS7 Mounting Bracket	2
④	E7 Block Kit	Clamp Block Kit	2
⑤	PMSC-104	Adjusting Bracket	2
⑥	W3213685	Hardware Kit	2
⑦	SCDCKIT	Dust Cover Kit	2



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

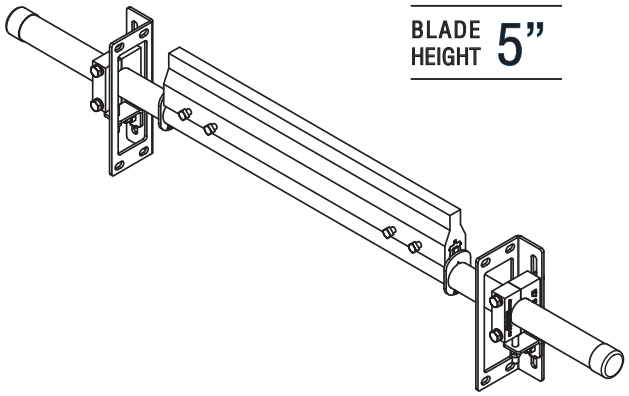
Belt Width	+3 Blade Width	AEM Part Number	Weight
24"	27"	SC7MGC27	20.5 lbs.
30"	33"	SC7MGC33	28 lbs.
36"	39"	SC7MGC39	33 lbs.
42"	45"	SC7MGC45	38.5 lbs.
48"	51"	SC7MGC51	43.5 lbs.
54"	57"	SC7MGC57	48.5 lbs.
60"	63"	SC7MGC63	53.5 lbs.
66"	69"	SC7MGC69	59 lbs.
72"	75"	SC7MGC75	64 lbs.
84"	87"	SC7MGC87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

AR BLADE

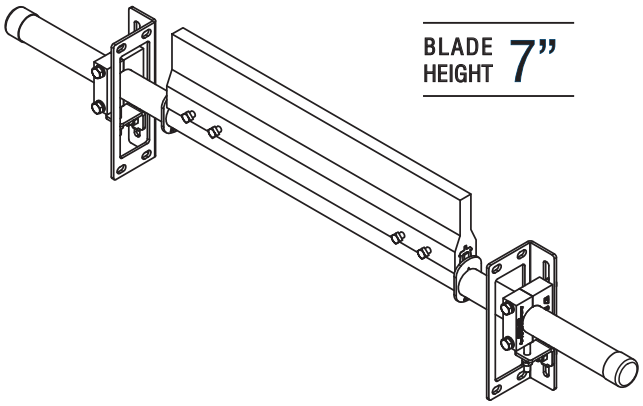
Belt Width	+3 Blade Width	AEM Part Number	Weight
24"	27"	SC7MGA27	20.5 lbs.
30"	33"	SC7MGA33	28 lbs.
36"	39"	SC7MGA39	33 lbs.
42"	45"	SC7MGA45	38.5 lbs.
48"	51"	SC7MGA51	43.5 lbs.
54"	57"	SC7MGA57	48.5 lbs.
60"	63"	SC7MGA63	53.5 lbs.
66"	69"	SC7MGA69	59 lbs.
72"	75"	SC7MGA75	64 lbs.
84"	87"	SC7MGA87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

NS7SC SERIES OPTIONS

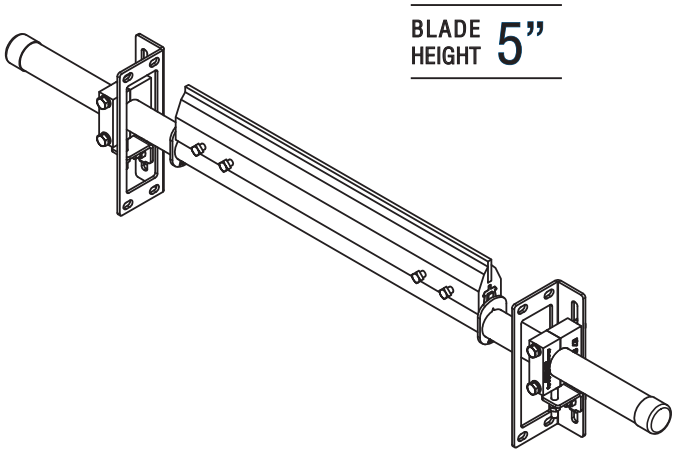
NS7SC5-M-UR Urethane Blade



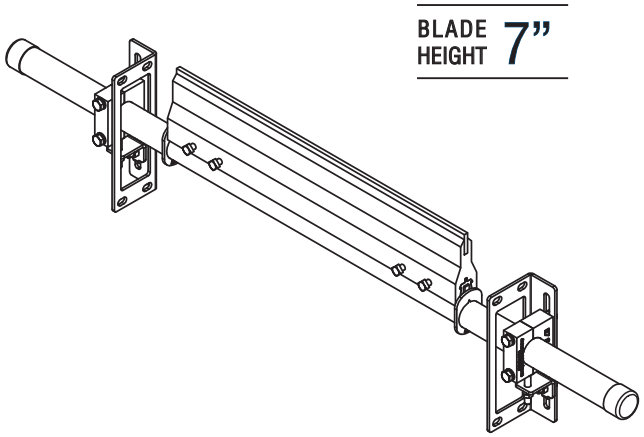
NS7SC7-M-UR Urethane Blade



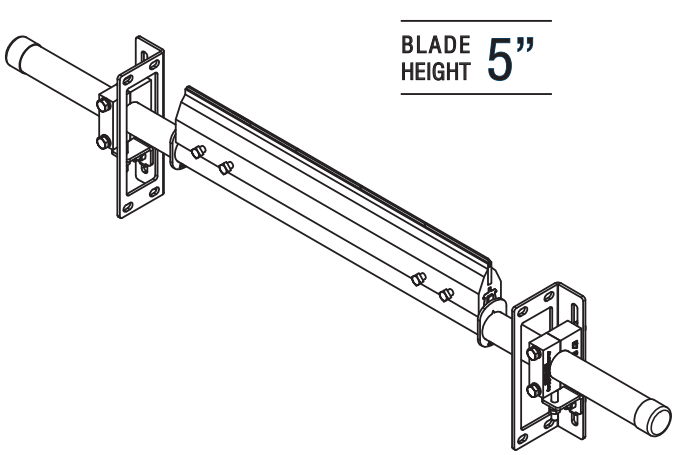
NS7SC5-M-AR Blade



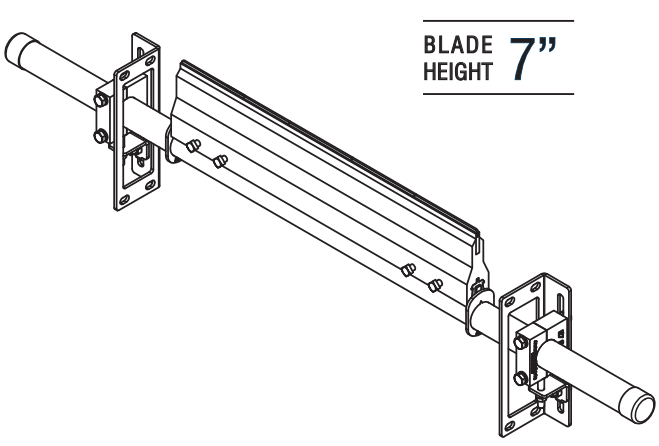
NS7SC7-M-AR Blade



NS7SC5-M-GC Carbide Blade



NS7SC7-M-GC Carbide Blade



INSTALLATION CHECK LIST

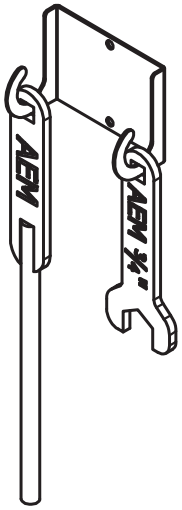
Confirmation of Cleaner Series and Size

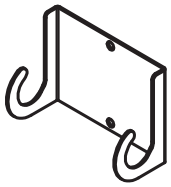
- Check that the cleaner size is correct for the belt width
- Check the belt cleaner assembly and confirm all the parts are included

Tools Required

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

AEM Tool Kit for NS7SC Cleaner





AEM Tool Holder Bracket

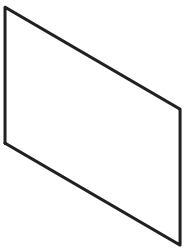
For hanging cleaner tools
Install by welding/bolting to chute close to cleaner

Cleaner Pipe Tool

For rotating pipe & blade to correct angle

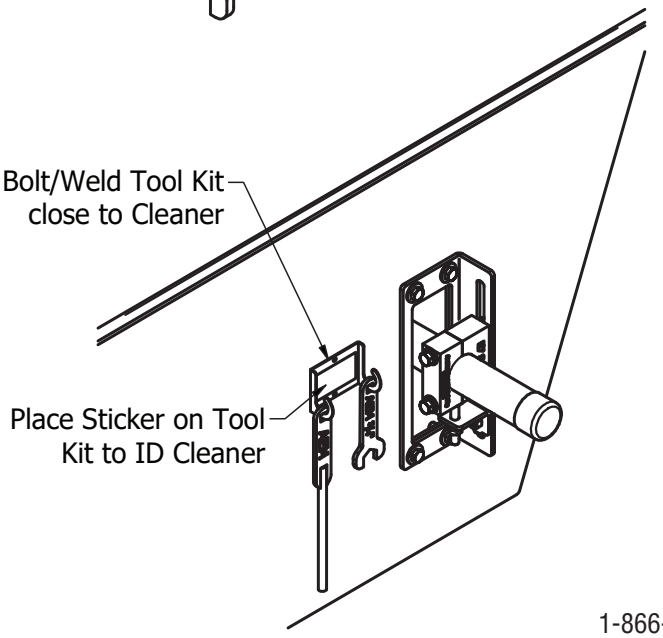
3/4" Cleaner Tool

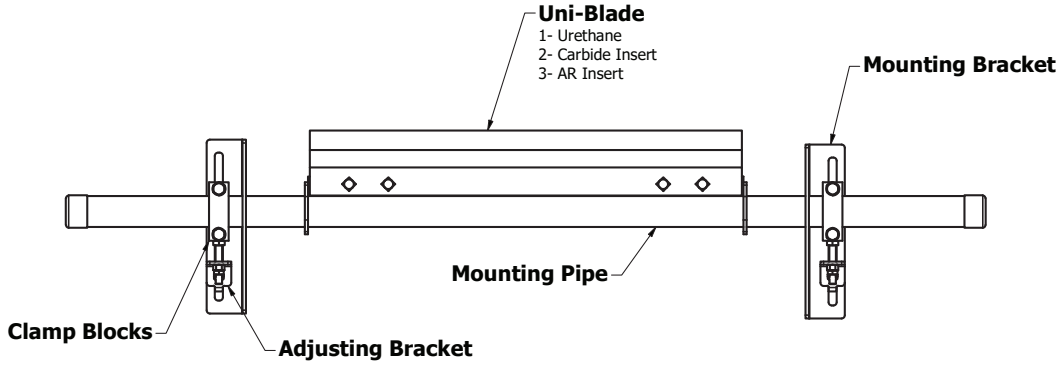
For tightening/loosening all hardware on cleaner and blade



NS7SC Cleaner Sticker

For identifying Cleaner
Place Sticker onto the AEM tool Hold Bracket





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

Step 1. - Location

It is recommended to install the Cleaner with Blade contact 4" downstream from the point where the Conveyor Belt leaves the Head Pulley (see Fig. A).

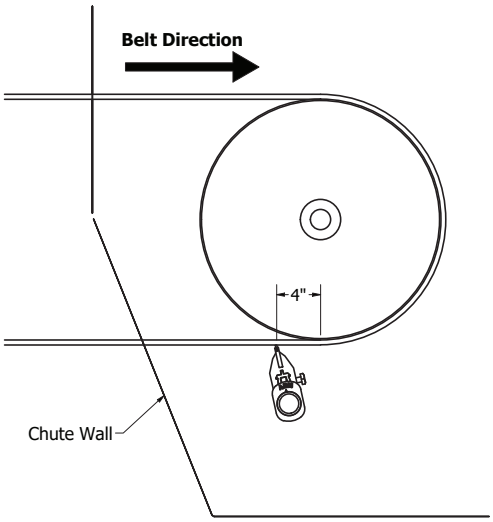


Fig. A

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.

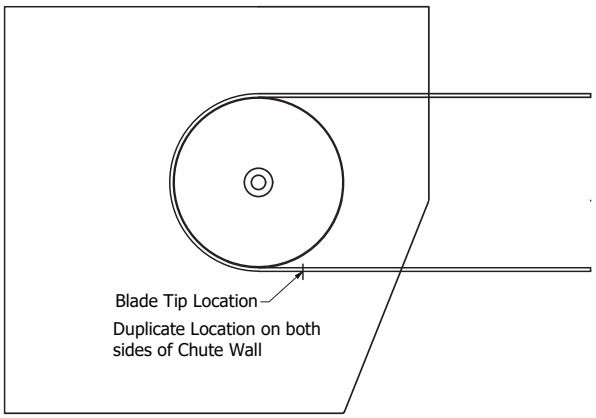


Fig. B

Step 3 - Blade and Mounting Pipe Access Hole

Measure and cut an access hole for the Blade and Mounting Pipe as shown in Fig. C. Make sure the access hole is a ***minimum*** of 11-1/8" x 3-9/16". Repeat step on the opposite side of the chute.

TIP:
Use Mounting Bracket to mark access hole location. Mark the (4) bolt hole locations now to use in next step.

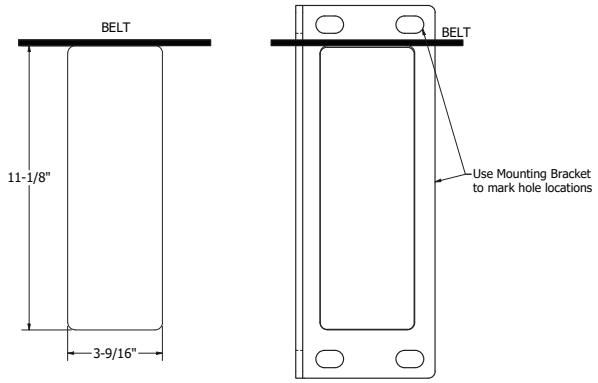


Fig. C

*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.

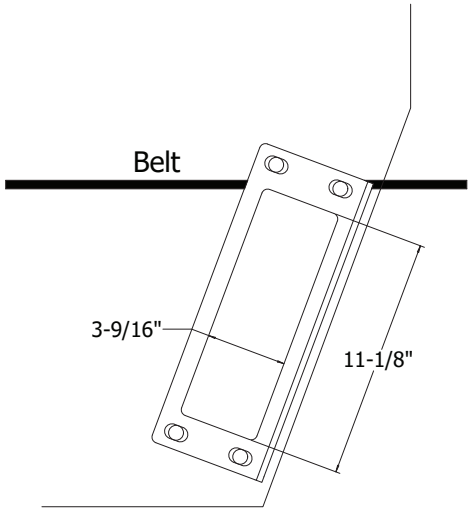


Fig. D

Step 4 - Attaching the Mounting Brackets to the Chute Wall

Install Mounting Brackets to the chute walls using the provided hardware. Use the 3/4" Cleaner Tool to tighten all hardware.

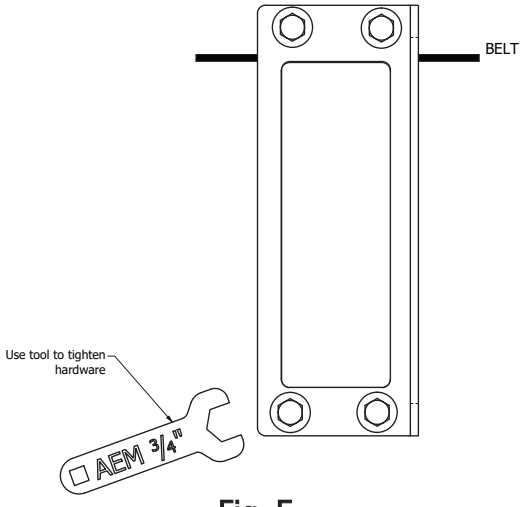


Fig. E

*IMPORTANT:
If Mounting Bracket is installed at an angle, make sure the flange with the slot is facing downwards as shown in Fig. F. This will aid in the installation of the Clamp Blocks.

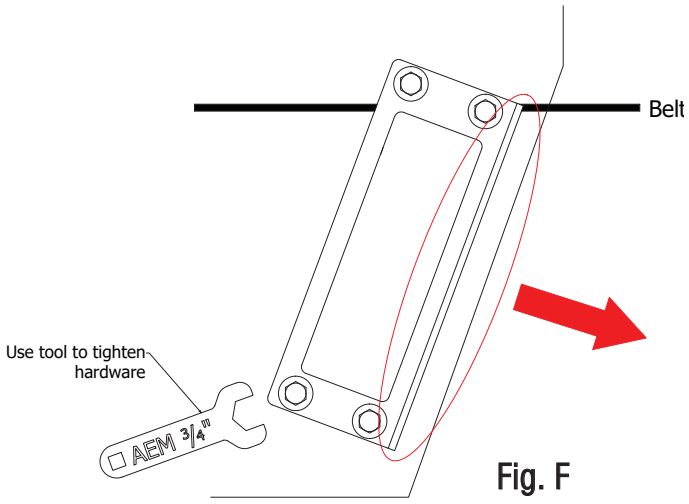


Fig. F

Step 5 – Attaching Uni-Blade to Mounting Pipe

Install the Uni-Blade to the Mounting Pipe. Tighten the set screws on the Uni-Blade using the 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!**

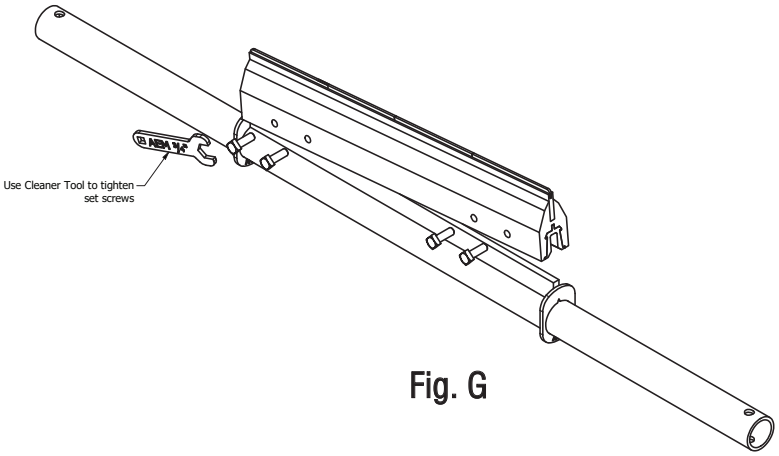


Fig. G

Step 6 – 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. H.

Make sure the end of the Mounting Pipe is passed through the Pipe access hole in the opposite Chute Wall.

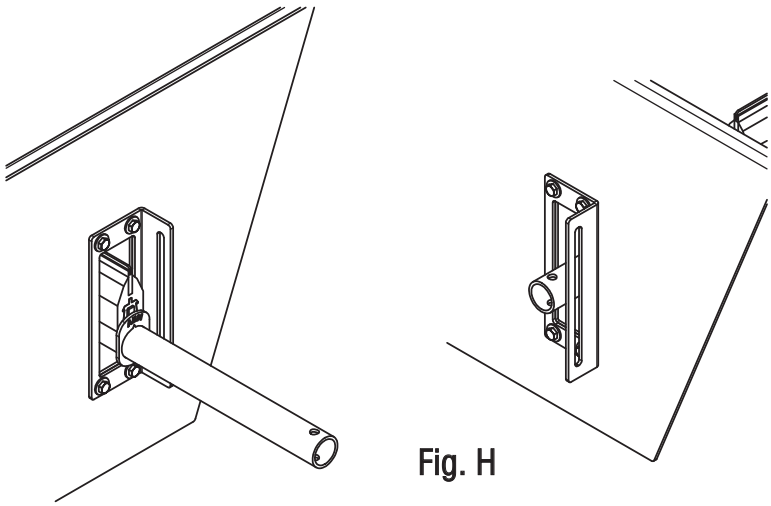
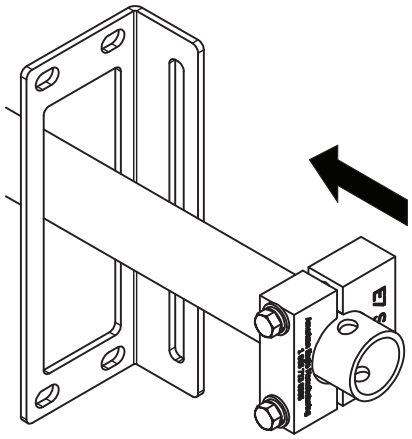


Fig. H

Step 7 – Installing Clamp Blocks

1) Install the Clamp Block assembly onto the Mounting Pipe. Slide the Clamp Block assembly over the Mounting Pipe and bolt to the slot using the provided hardware and 3/4" Cleaner Tool as shown in Fig. I. Hand-tighten the bolts holding the Upper Clamp Block to the Mounting Bracket so they can be adjusted later in Step 8.



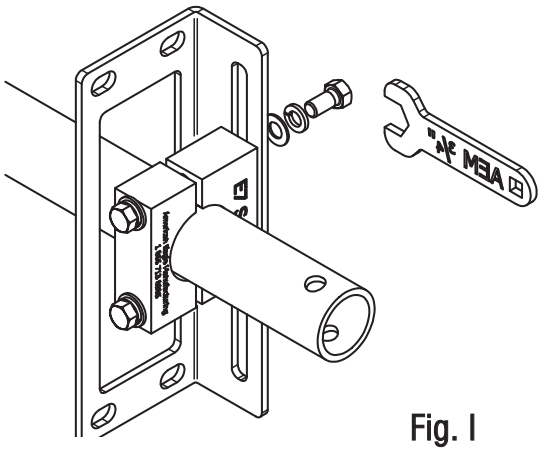


Fig. I

2) Center the Uni-Blade on the Conveyor Belt, making sure that the Uni-Blade extends past the Belt 1-1/2" on both sides (See Fig. J).

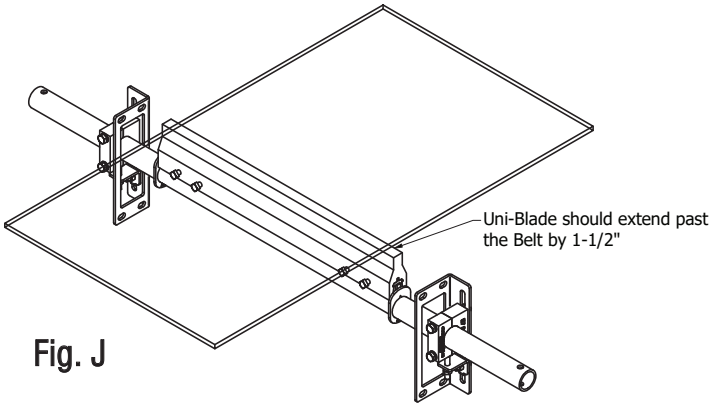


Fig. J

3) Using the Cleaner Pipe Tool, rotate the Pipe and Uni-Blade (See Fig. K). Use the below parameters for setting the angle of the Uni-Blade.

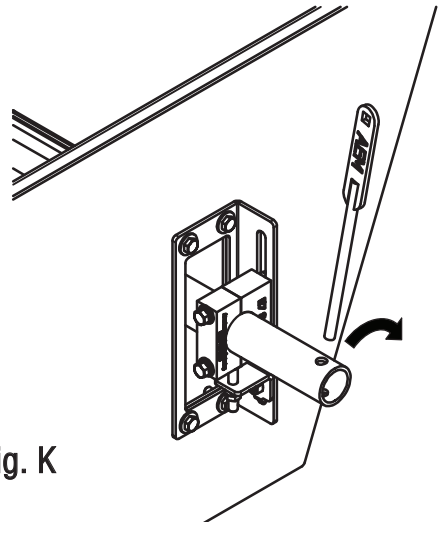
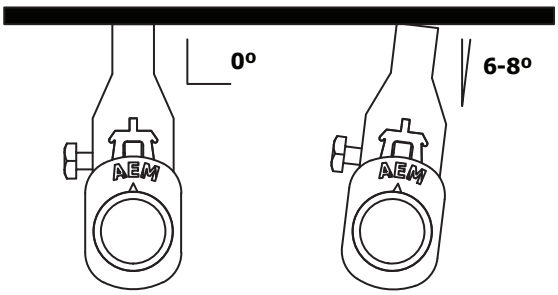


Fig. K

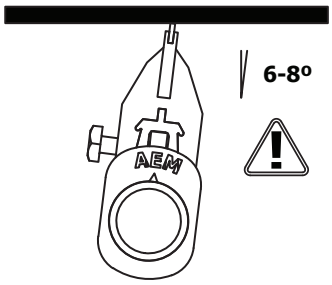
Urethane Uni-Blades:

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



AR/Carbide Insert Uni-Blades:

- 6-8º Angle ONLY!



CAUTION

6-8º Setting Angle is CRITICAL!
AR/Carbide Insert Uni-Blades CANNOT be used on Reversing Belts!

After setting the correct angle for the Uni-Blade and ensuring Uni-Blade is centered on the Belt, tighten the bolts connecting the Clamp Blocks to the Mounting Pipe.

Step 8 - 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.***

Raise the Adjusting Bracket until the head of the Adjusting Bolt is touching the Clamp Blocks.

Loosen the Jam Nut on the bottom of the Adjusting Bracket using the 3/4" Cleaner Tool.

Using the 3/4" Cleaner Tool and a tape measure, turn the Adjusting Bolt to adjust the tension ***equally on both sides.***

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.

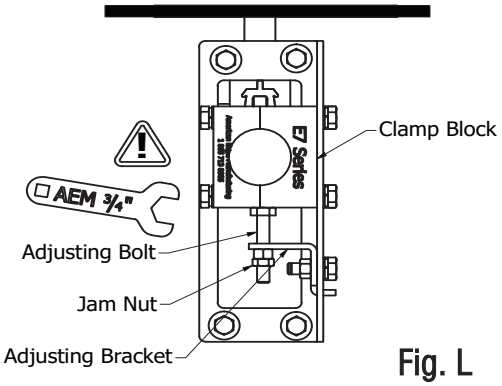


Fig. L

CAUTION

DO NOT EXCEED 1/8" INCREMENTS ON CARBIDE AND AR TIP UNI-BLADES

DO NOT EXCEED 1/4" INCREMENTS ON URETHANE UNI-BLADES

⚠ CAUTION

For Carbide Tip and AR Tip Blades,
DO NOT OVER TENSION!

⚠ CAUTION

Carbide Tip Blades are NOT RECOMMENDED
WITH MECHANICAL SPLICES!

Step 9

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 Adjusting Brackets.

Step 10

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 11

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

Install Dust Covers in the access hole cutout by placing over the Mounting Pipe and snapping the Dust Covers into the access hole. Trim any excess length from the longer 9-inch Dust Cover to fit as shown in Fig. M.

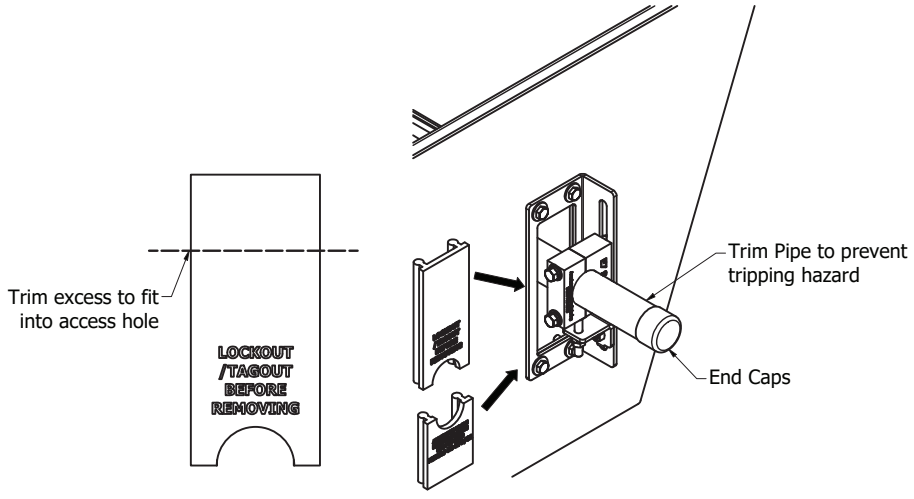


Fig. M

NOTES

American Eagle Manufacturing LLC
1 866 713 8985
252 633 0603
New Bern, North Carolina 28560
AmericanEagleManufacturing.com