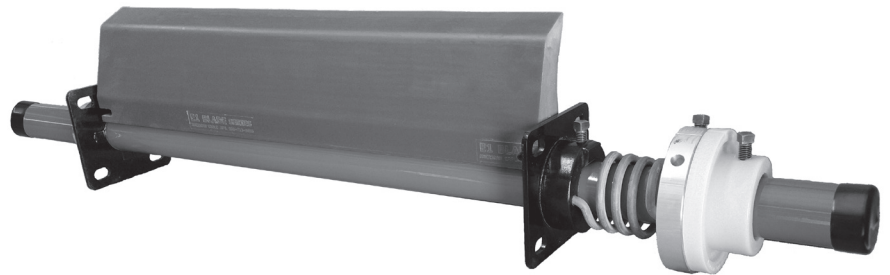


IT'S THE YEAR OF
INNOVATION
AT AMERICAN EAGLE
MANUFACTURING



E4HD

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) Match recommended cleaner to pulley diameter
- B) Confirm blade tip location. (see page 5)
- C) Confirm blade width to material path (see page 5)

4.2 Chute installation

- A) Choose location of tensioner (on left or right side of chute wall). Make this decision based on ease of maintenance of tensioner and blade replacement.
- B) Pre-check any obstructions for proper location
- C) Confirm adequate access to inside of chute. Chute should have access door or access panel for blade replacement and maintenance. (see page 6 for Eagle Safety Inspection Access Door and/or Eagle Blade Access Plate, if necessary)
- D) Confirm Standard mounting tube length is adequate (see page 7 item 2)

4.3 Non-Chute installation

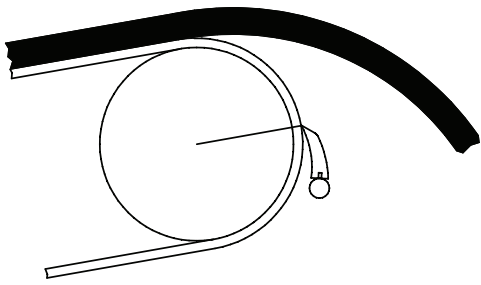
- A) You will need to have a plan to install cleaner without a chute wall. This can be done by fabricating panels and welding to both sides of conveyor frame. We also offer two pre-manufactured solutions to this problem. (see page 6 for the Universal Telescoping Mount or the Eagle Mounting Plate, if necessary)
- B) Pre-check any obstructions for proper location

4.4 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.

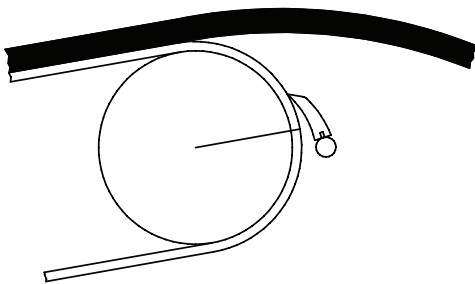
BLADE LOCATION



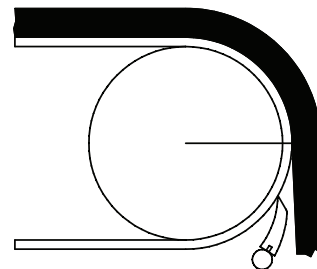
Selecting the blade-tip location is the first critical decision that will contribute to maintaining the life of your blade.

The blade should never be used as a ramp for material to slide over. The bulk of the material should gravity-fall over the face of the blade. Blade wear should occur at blade-tip, at point of contact with the belt, not the face of the blade.

**AVERAGE SPEED
NORMALLY 300-350FPM**

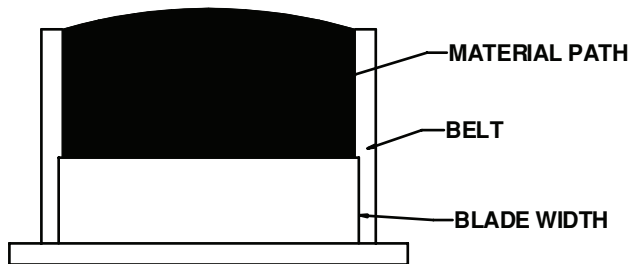


**BELT SPEEDS NORMALLY
400FPM**



**SLOW MOVING BELT SPEED
NORMALLY 100FPM**

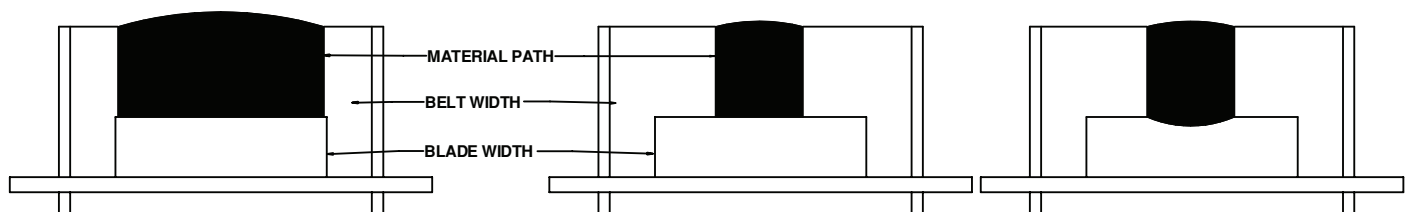
MATERIAL PATH



CORRECT

The second critical determination for blade life is the blade width itself, which will also influence the cleanliness of your belt. You will need a blade width of -2 (standard) or -8, depending on the center path of the material as it travels the belt.

75% of all premature blade-failure is the result of improper blade width.



**CORRECT BLADE
WIDTH RESULTS
IN EVEN WEAR**

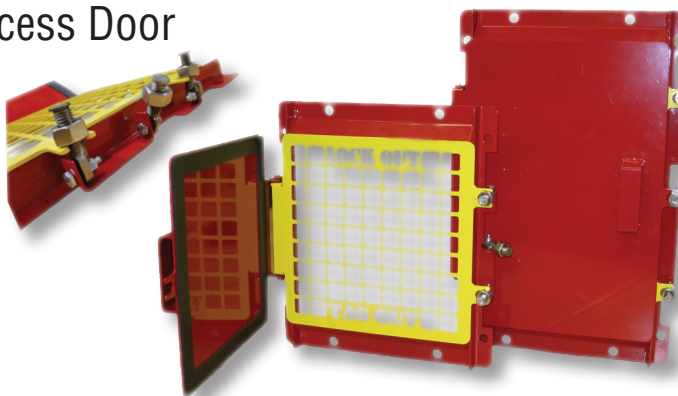
**BLADE DOESN'T
MATCH MATERIAL
PATH...**

**...RESULTING
IN POOR BLADE
WEAR FAILURE**

PRIMARY CLEANER ACCESSORIES

Eagle Safety Inspection Access Door

Eagle Safety Inspection Access Door is designed for chute inspection and easier maintenance of primary cleaners, including blade change-out. Constructed of all steel, the doors are laser cut, formed and powder coated for a trouble free life.



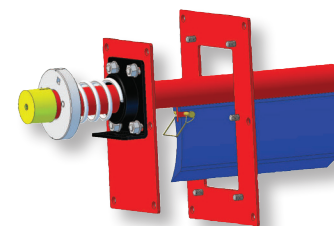
Part Number	Size
ESIAD9x12	9"x12"
ESIAD12x12	12"x12"
ESIAD12x18	12"x18"
ESIAD18x18	18"x18"
ESIAD18x24	18"x24"
ESIAD24x24	24"x24"
ESIAD24x48	24"x48"
ESIAD42x42	42"x42"

Eagle Blade Access Plate

Designed to eliminate a major safety hazard, Eagle Blade Access Plate allows removal of the entire primary cleaner as a cartridge from one side of the headbox. This eliminates personnel having to get inside the headbox, creating a safer work environment. By simply removing six bolts on one side and the set collar on the other, two people can change-out the blade and return the cleaner to its operating position quickly and safely.

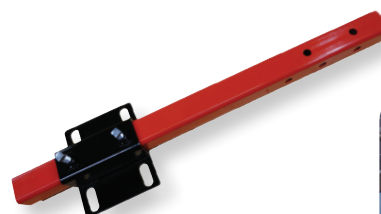


Part Number	Size
EBAP-1	17"x11-1/2"



Universal Telescoping Mount

This low cost mount provides quick installation of primary cleaners, lightening the burden of future maintenance. With our universal cleaner mounting bracket you can mount underneath, on the outside or inside of the telescoping bracket. No one else offers these options!



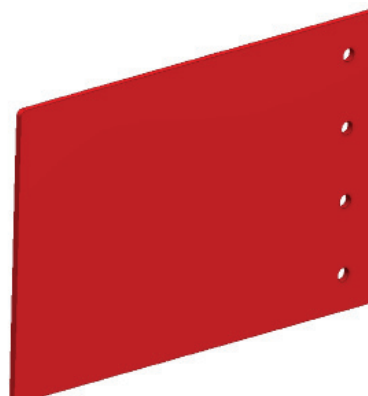
Part Number	Size
UTM30	30"
UTM48	48"

(set of 2)



Eagle Mounting Plate or Chute Patch

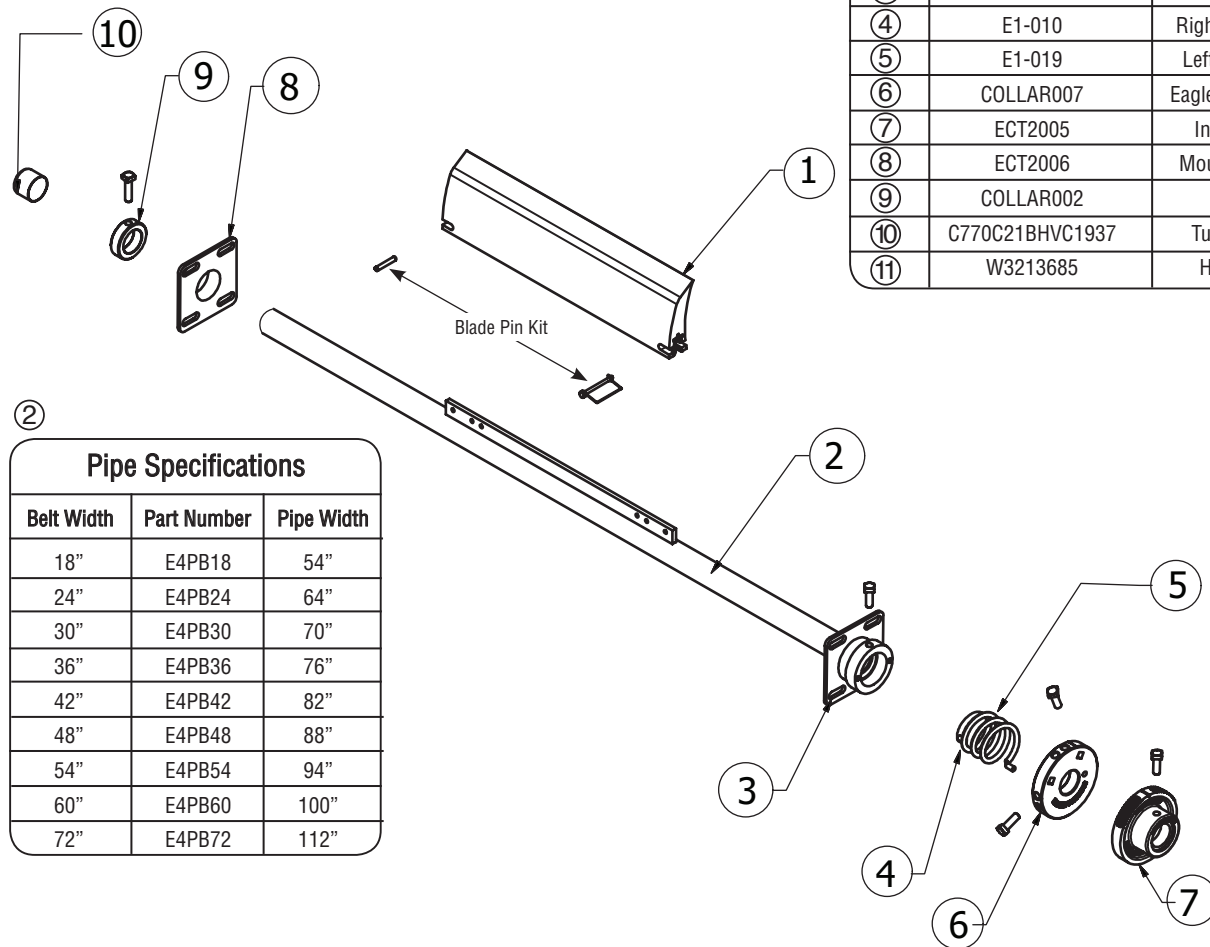
This low cost Mounting Plate provides easy installation of primary cleaners without chute walls. It also can be used as a chute patch for new installation of primary or secondary cleaners.



Part Number	Size
EMP1218	12"x18"

(set of 2)

E4HD REPLACEMENT PARTS



Parts List			
Num.	Part Number	Description	Qty.
①	E4xxx	Blade	1
②	E4PBxx	Mounting Tube	1
③	ECT2001	Tensioner Housing	1
④	E1-010	Right Hand Spring	1
⑤	E1-019	Left Hand Spring	1
⑥	COLLAR007	Eagle Torsion Collar	1
⑦	ECT2005	Indicator Ring	1
⑧	ECT2006	Mounting Bracket	1
⑨	COLLAR002	Collar	1
⑩	C770C21BHVC1937	Tube End Caps	2
⑪	W3213685	Hardware Kit	1

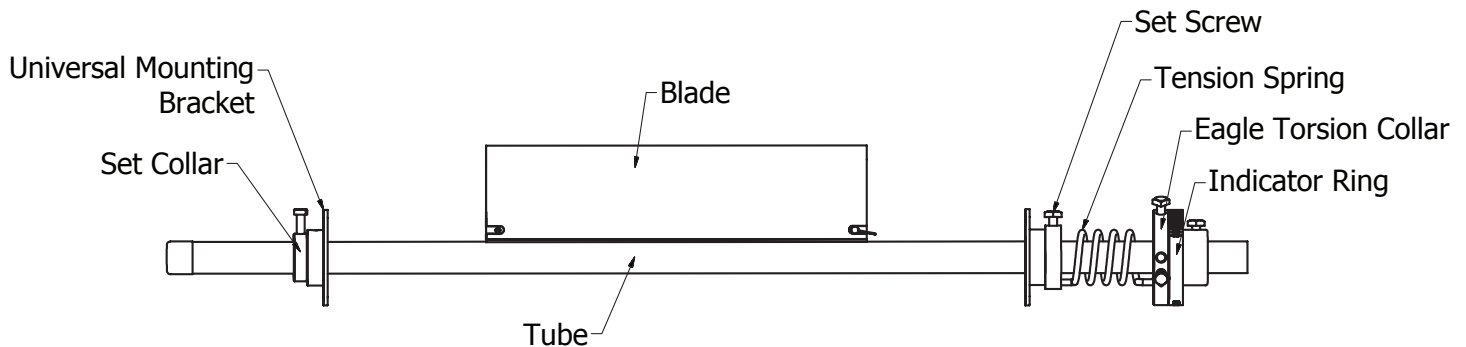
②

Pipe Specifications		
Belt Width	Part Number	Pipe Width
18"	E4PB18	54"
24"	E4PB24	64"
30"	E4PB30	70"
36"	E4PB36	76"
42"	E4PB42	82"
48"	E4PB48	88"
54"	E4PB54	94"
60"	E4PB60	100"
72"	E4PB72	112"

①

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		
	-2" Belt Width	-8" Belt Width	-2" Belt Width	-8" Belt Width	-2" Belt Width	-8" Belt Width	-2" Belt Width	-8" Belt Width	-2" Belt Width	-8" Belt Width	
18"	E4M16	E4M10	E4U16	E4U10	E4C16	E4C10	E4H16	E4H10	E4W16	E4W10	
24"	E4M22	E4M16	E4U22	E4U16	E4C22	E4C16	E4H22	E4H16	E4W22	E4W16	
30"	E4M28	E4M22	E4U28	E4U22	E4C28	E4C22	E4H28	E4H22	E4W28	E4W22	
36"	E4M34	E4M28	E4U34	E4U28	E4C34	E4C28	E4H34	E4H28	E4W34	E4W28	
42"	E4M40	E4M34	E4U40	E4U34	E4C40	E4C34	E4H40	E4H34	E4W40	E4W34	
48"	E4M46	E4M40	E4U46	E4U40	E4C46	E4C40	E4H46	E4H40	E4W46	E4W40	
54"	E4M52	E4M46	E4U52	E4U46	E4C52	E4C46	E4H52	E4H46	E4W52	E4W46	
60"	E4M58	E4M52	E4U58	E4U52	E4C58	E4C52	E4H58	E4H52	E4W58	E4W52	
72"	E4M70	E4M64	E4U70	E4U64	E4C70	E4C64	E4H70	E4H64	E4W70	E4W64	

E4HD INSTALLATION INSTRUCTIONS

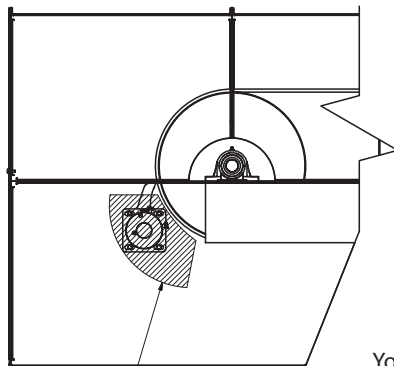


***IMPORTANT MAKE SURE CONVEYOR IS LOCKED OUT AND TAGGED OUT BEFORE ANY WORK BEGINS**

Step 1.

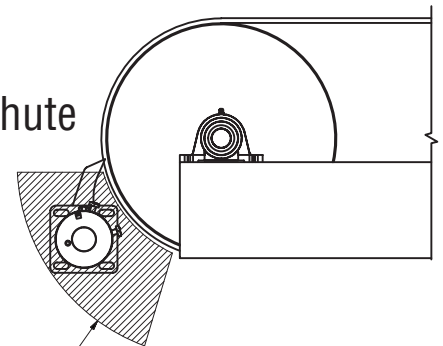
Inspect the conveyor head pulley. If there is a chute surrounding the head pulley continue to Step 2. A conveyor without a chute will require either mounting plates or a universal telescopic mount.

Conveyor
with Chute



Keep Area Clear of All Obstructions
ie: Hoses, Lines, Electrical Wires
and Any Other Mounted Components

Conveyor
without Chute

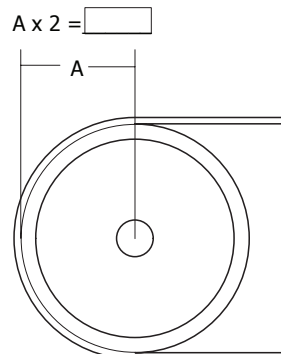


You will need to bridge the gap between
conveyor and proper location needed for
belt cleaner installation

*SEE PAGE 6 FOR OPTIONS

Step 2.

Determine pulley diameter, measuring from the center of the shaft to pulley surface A dimension. Multiply "A" dimension x 2 for pulley diameter. Using the Gap Chart and pulley diameter, determine "G" dimension. This is the distance from the center of the mounting tube to the face of the belt.



Gap Dimension Chart

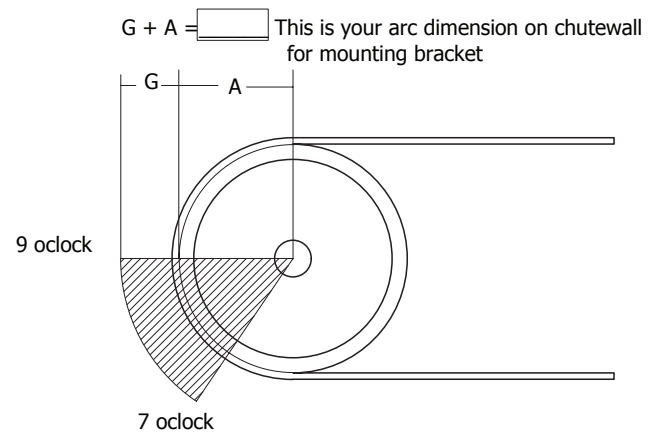
PULLEY DIAMETER	GAP
16" - 20"	4"
24" - 36"	3-5/8"
42" +	3"
TOLERANCES + OR - 1/4"	

Your Gap Dimension

E4HD INSTALLATION INSTRUCTIONS

Step 3.

After determining the Gap “G” dimension transfer $A + G$ dimensions to the chute wall in an arc from 7 o'clock to 9 o'clock. If working from inside the chute transfer “G” dimension from 7 o'clock to 9 o'clock on the chute wall.

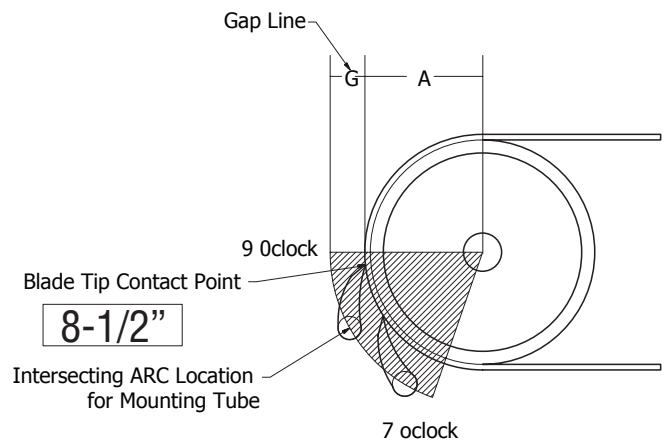


Step 4.

Determine blade-tip contact point, usually between 9 o'clock and 7 o'clock

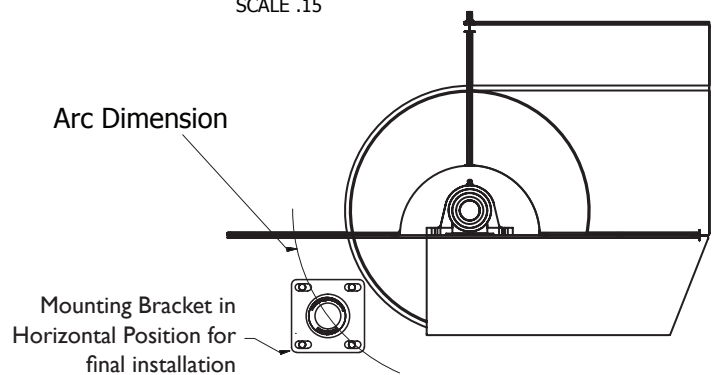
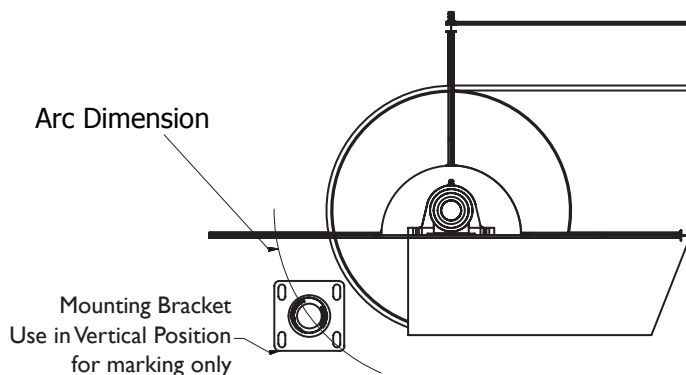
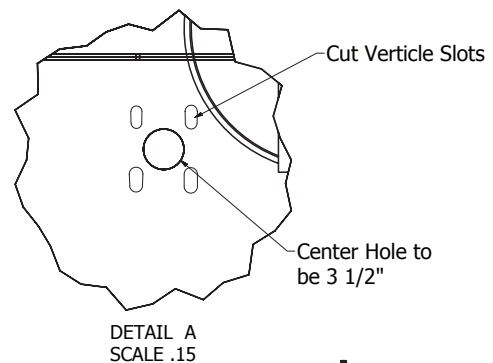
NEVER PLACE THE BLADE IN THE MATERIAL PATH

After picking the blade tip contact point, measure 8-1/2" and mark with soap stone or marker crossing an intersecting arc with the “G” dimension arc on the chute wall. This will be the center of the mounting tube.



Step 5.

Center flange bracket over the intersecting arc dimensions on the chute wall with bolt slots vertical. Trace the flange pattern center and bolt holes with soapstone or marker. Cut the center hole 3 1/2" and bolt holes as marked. This allows adjustment of the mounting tube.

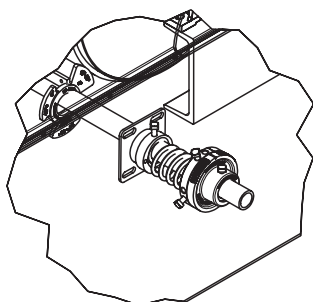


E4HD INSTALLATION INSTRUCTIONS

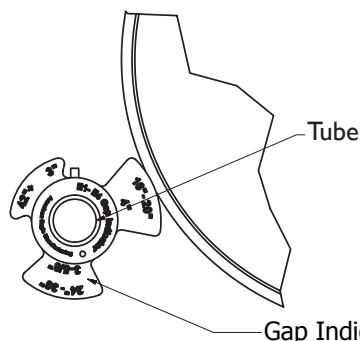
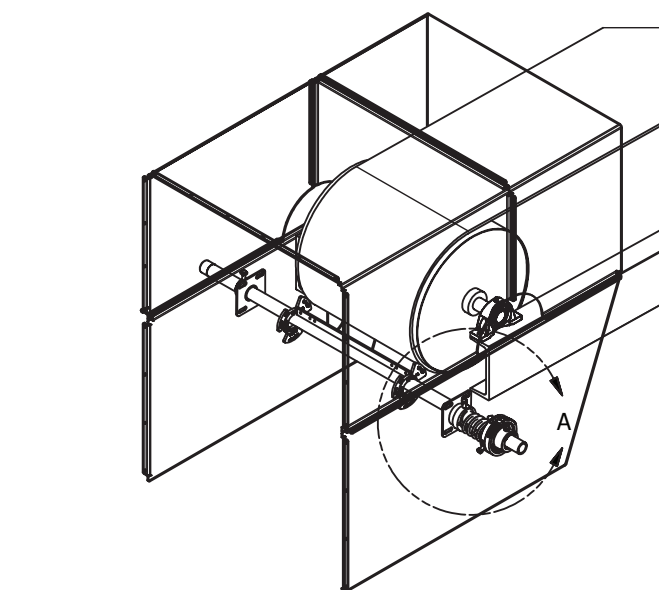
Step 6.

Pass the mounting tube through the access holes and install the mounting brackets to the chute wall. Facing the head pulley, mount the covered tension bracket on either left or right side as desired.

Install The Gap Gage rings on the mounting tube both left and right side.



Rotate to the correct "G" dimension marked on the gage. Tighten mounting brackets finger tight. Place a level on the mounting tube to check for level and square. Tighten all mounting bolts. Install the blade on the mounting tube.

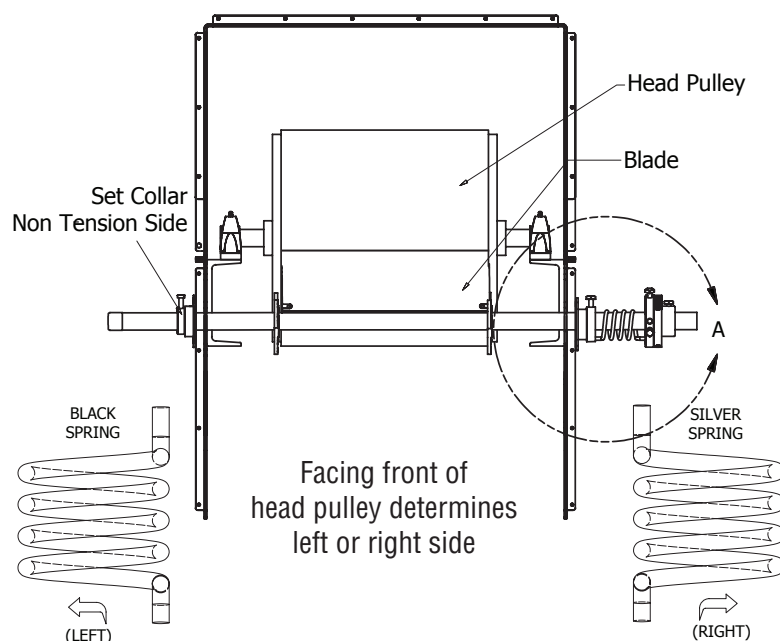


Gap Dimension Chart	
PULLEY DIAMETER	GAP
16" - 20"	4"
24" - 36"	3-5/8"
42" +	3"
TOLERANCES + OR - 1/4"	

Your Gap Dimension

Step 7.

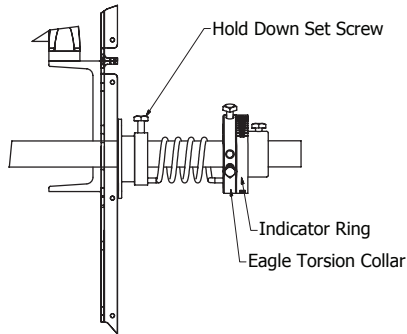
Center the blade on the head pulley and install the set collar on non-tension side. Install the tensioning spring (silver spring for right side, black spring for left side) as pictured. Install eagle torsion collar and tension indicator ring.



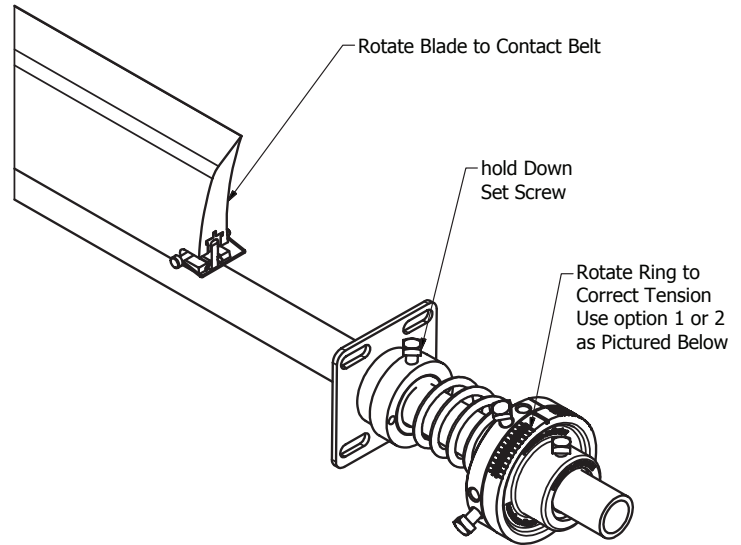
E4HD INSTALLATION INSTRUCTIONS

Step 8.

Rotate blade into operating position and tighten hold down set screw. (This will hold the blade in place while setting tension.)



Tension Chart		
BELT WIDTH	BLADE WIDTH	TENSION (LBS)
18	16	16
24	22	22
30	28	28
36	34	34
42	40	40
48	46	46
54	52	52
60	58	58
72	70	70



Step 9.

Align yellow tension indicator ring with scribed line on the eagle torsion collar. Using the tension bar provided pull back on the eagle torsion collar until the correct poundage is aligned on both the eagle torsion collar and indicator ring. **Suggested tension is one pound per inch of blade width.** Lock down the set screws on the eagle torsion collar to the mounting tube.

IMPORTANT NOTICE:

RELEASE HOLD DOWN SET SCREW ON MOUNTING BRACKET AFTER EAGLE TORSION COLLAR IS SET

Check the operation of the cleaner using tension bar. Pull back and release to insure proper operation. When resetting tension on the cleaner follow steps 8 and 9.

Step 10.

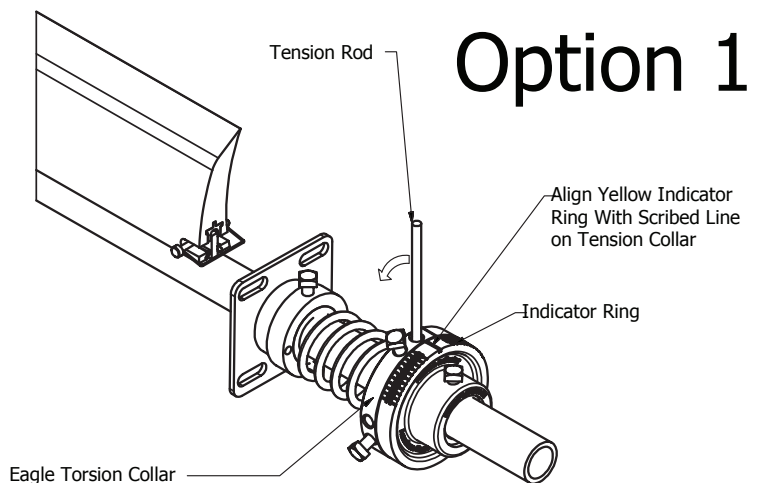
Trim the mounting tube 3" from either tension or non tension side and install yellow safety caps.

Note: Display safety stickers on chute wall or other clearly visible area

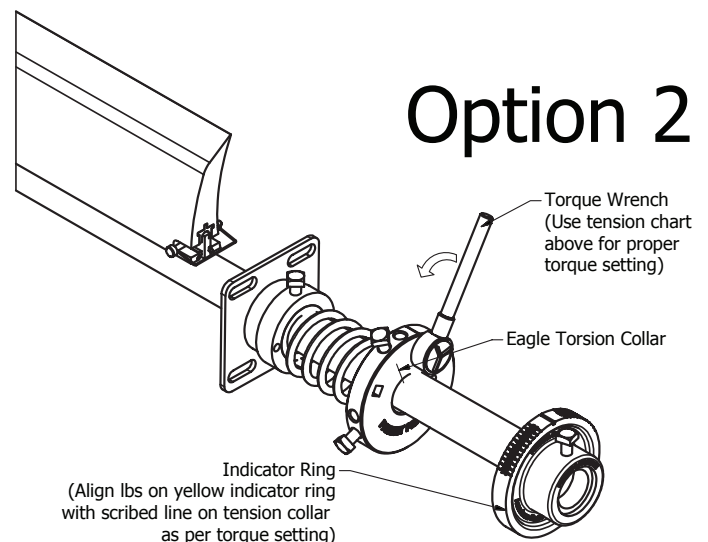
Step 11.

Test run the conveyor to check proper installation.

1-866-713-8985



Option 1



Option 2

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 WEAR INSPECTIONS

Inspect proper blade wear even across blade (if center wear appears, change to a narrower blade. Blade should be only slightly larger than material path). Always check for correct tension settings.

TROUBLESHOOTING

INSUFFICIENT CLEANING	1) Tension too low (set tension as listed in installation) 2) High blade wear (replace blade)
IRREGULAR BLADE WEAR	1) Worn in center of the blade (install narrower blade covering material path) 2) Worn unevenly (check “G” dimension, level & square) 3) Blade damage (check belt splice (s) and repair) install new blade
VIBRATION, CHATTER	1) Tension too high or too low (check and adjust tension as listed in installation instructions) 2) Blade worn changing angle (replace blade) Contact American Eagle to ensure correct blade is being used
CLEANER, BLADE FLIPPED	Blade flipped, pulled through. (Check installation “G” dimension worn blade.) Replace blade.



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