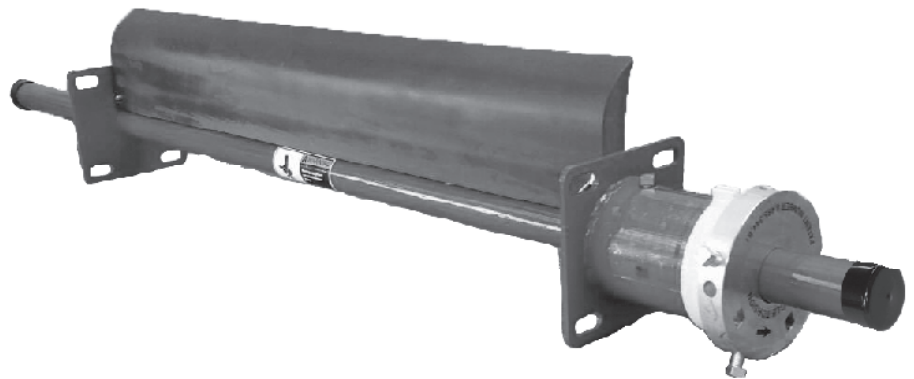


IT'S THE YEAR OF
INNOVATION
AT AMERICAN EAGLE
MANUFACTURING



MECT5HP

INSTRUCTION MANUAL

FACILITY NAME

CONVEYOR NUMBER

DATE OF INSTALLATION

INSTALLED BY

TABLE OF CONTENTS

Disclaimer/Safety	page 3
-------------------	--------

3.1 Disclaimer

3.2 Safety

Installation Check List	page 4
-------------------------	--------

4.1 Confirmation of Cleaner Series and Size

4.2 Chute Installation

4.3 Non Chute Installation

4.4 Tools Required

Blade Location / Material Path	page 5
--------------------------------	--------

Primary Cleaner Accessories	page 6
-----------------------------	--------

6.1 Eagle Safety Inspection Access Door

6.2 Eagle Blade Access Plate

6.3 Universal Telescoping Mount

6.4 Eagle Mounting Plate

Replacement Parts List	page 7
------------------------	--------

Primary Cleaner Installation	page 8/11
------------------------------	-----------

Maintenance / Trouble Shooting	page 12
--------------------------------	---------

12.1 Maintenance

12.2 Trouble Shooting

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

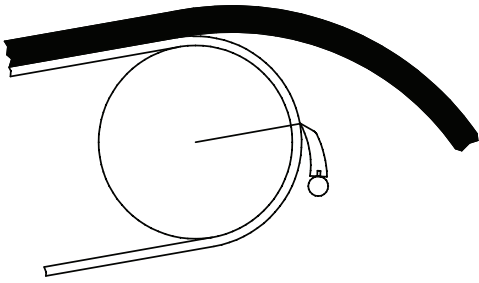
- A) You will need to have a plan to install cleaner without a chute wall. This can be done by fabricating panels and welding to both sides of conveyor frame. We also offer two pre-manufactured solutions to this problem. (see page 6 for the Universal Telescoping Mount or the Eagle Mounting Plate, if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

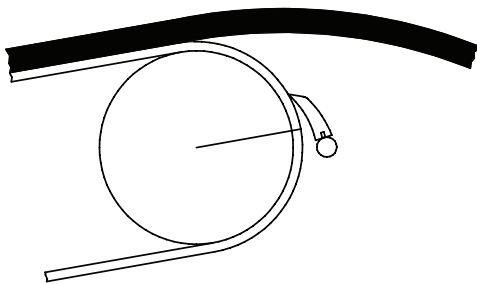
BLADE LOCATION



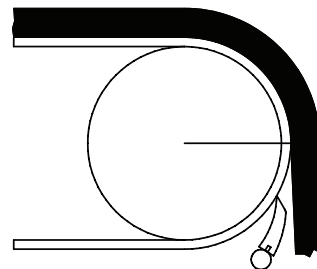
Selecting the blade-tip location is the first critical decision that will contribute to maintaining the life of your blade.

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**

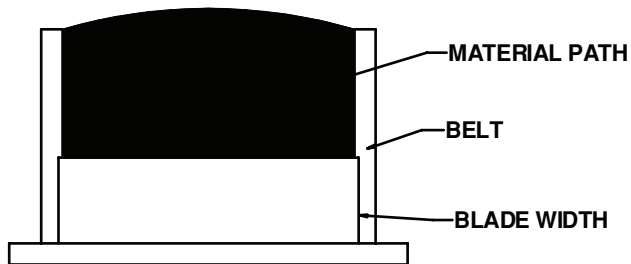


**BELT SPEEDS NORMALLY
400FPM**



**SLOW MOVING BELT SPEED
NORMALLY 100FPM**

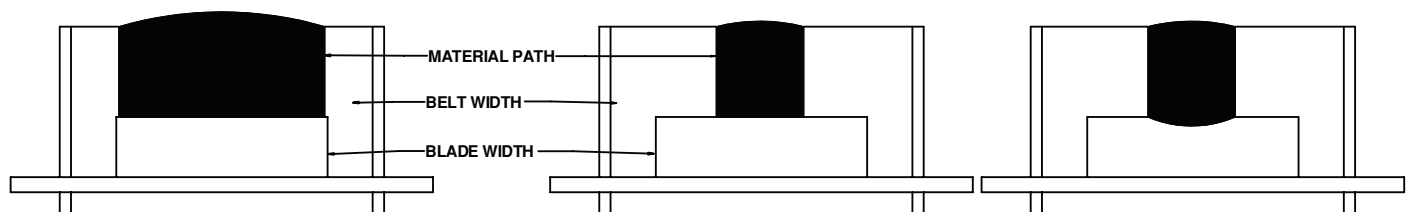
MATERIAL PATH



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**

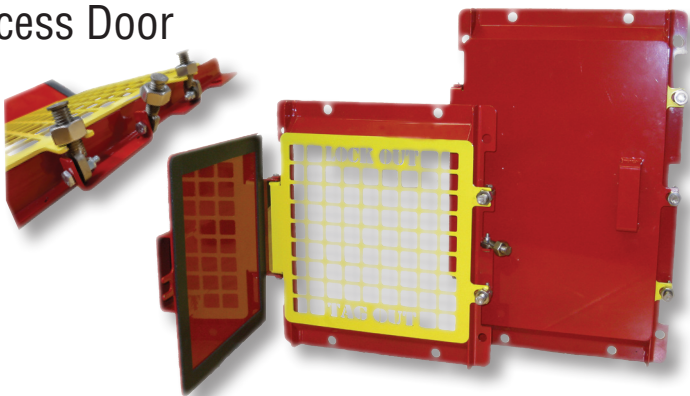
**BLADE DOESN'T
MATCH MATERIAL
PATH....**

**...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.



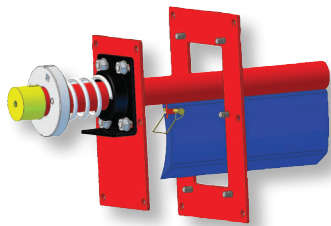
Part Number	Size
ESIAD9x12	9"x12"
ESIAD12x12	12"x12"
ESIAD12x18	12"x18"
ESIAD18x18	18"x18"
ESIAD18x24	18"x24"
ESIAD24x24	24"x24"
ESIAD24x48	24"x48"
ESIAD42x42	42"x42"

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.

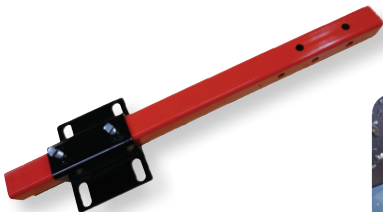


Part Number	Size
EBAP-1	17"x11-1/2"



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!



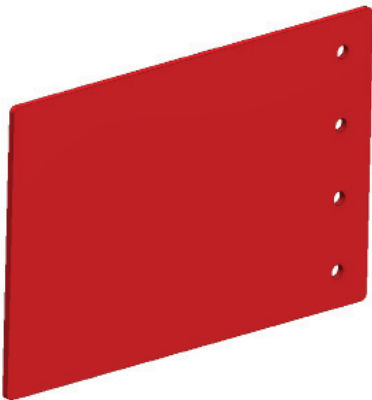
Part Number	Size
UTM30	30"
UTM48	48"

(set of 2)



Eagle Mounting Plate or Chute Patch

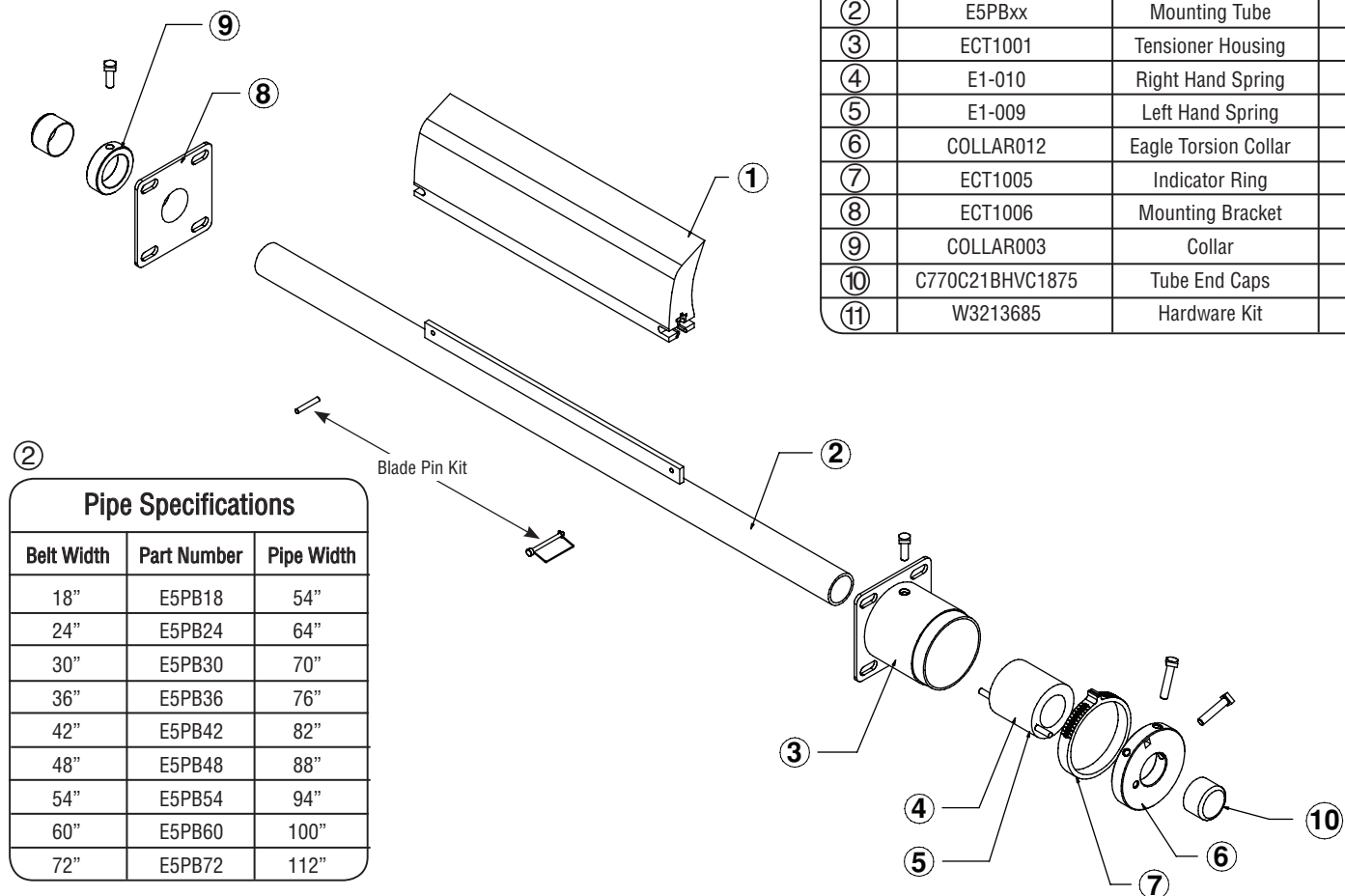
This low cost Mounting Plate provides easy installation of primary cleaners without chute walls. It also can be used as a chute patch for new installation of primary or secondary cleaners.



Part Number	Size
EMP1218	12"x18"

(set of 2)

MECT5HP REPLACEMENT PARTS



Parts List			
Num.	Part Number	Description	Qty.
①	E5xxx	Blade	1
②	E5PBxx	Mounting Tube	1
③	ECT1001	Tensioner Housing	1
④	E1-010	Right Hand Spring	1
⑤	E1-009	Left Hand Spring	1
⑥	COLLAR012	Eagle Torsion Collar	1
⑦	ECT1005	Indicator Ring	1
⑧	ECT1006	Mounting Bracket	1
⑨	COLLAR003	Collar	1
⑩	C770C21BHVC1875	Tube End Caps	2
⑪	W3213685	Hardware Kit	1

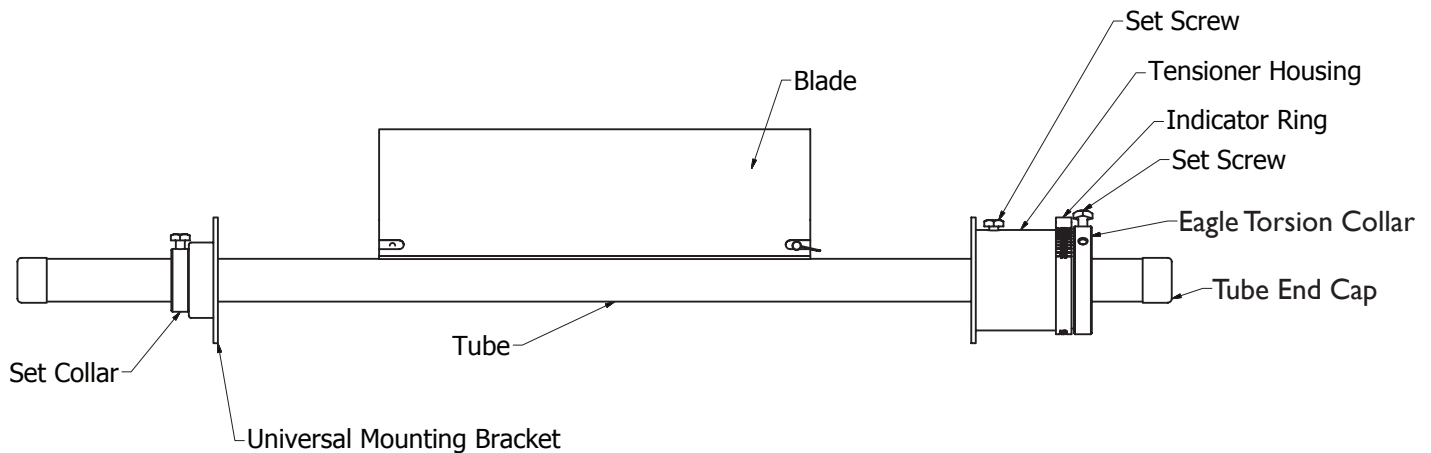
②

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"

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"	E5A-02M16	E5A-02M10	E5A-02U16	E5A-02U10	E5A-02C16	E5A-02C10	E5A-02H16	E5A-02H10	E5A-02W16	E5A-02W10	
24"	E5A-02M22	E5A-02M16	E5A-02U22	E5A-02U16	E5A-02C22	E5A-02C16	E5A-02H22	E5A-02H16	E5A-02W22	E5A-02W16	
30"	E5A-02M28	E5A-02M22	E5A-02U28	E5A-02U22	E5A-02C28	E5A-02C22	E5A-02H28	E5A-02H22	E5A-02W28	E5A-02W22	
36"	E5A-02M34	E5A-02M28	E5A-02U34	E5A-02U28	E5A-02C34	E5A-02C28	E5A-02H34	E5A-02H28	E5A-02W34	E5A-02W28	
42"	E5A-02M40	E5A-02M34	E5A-02U40	E5A-02U34	E5A-02C40	E5A-02C34	E5A-02H40	E5A-02H34	E5A-02W40	E5A-02W34	
48"	E5A-02M46	E5A-02M40	E5A-02U46	E5A-02U40	E5A-02C46	E5A-02C40	E5A-02H46	E5A-02H40	E5A-02W46	E5A-02W40	
54"	E5A-02M52	E5A-02M46	E5A-02U52	E5A-02U46	E5A-02C52	E5A-02C46	E5A-02H52	E5A-02H46	E5A-02W52	E5A-02W46	
60"	E5A-02M58	E5A-02M52	E5A-02U58	E5A-02U52	E5A-02C58	E5A-02C52	E5A-02H58	E5A-02H52	E5A-02W58	E5A-02W52	
72"	E5A-02M70	E5A-02M64	E5A-02U70	E5A-02U64	E5A-02C70	E5A-02C64	E5A-02H70	E5A-02H64	E5A-02W70	E5A-02W64	

MECT5HP INSTALLATION INSTRUCTIONS

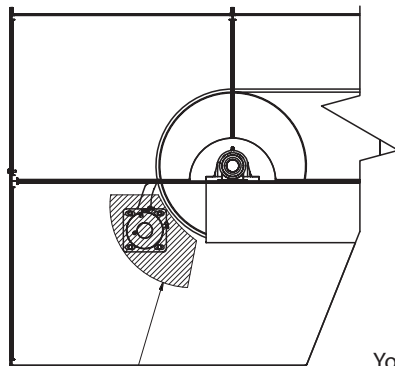


***IMPORTANT MAKE SURE CONVEYOR IS LOCKED OUT AND TAGGED OUT BEFORE ANY WORK BEGINS**

Step 1.

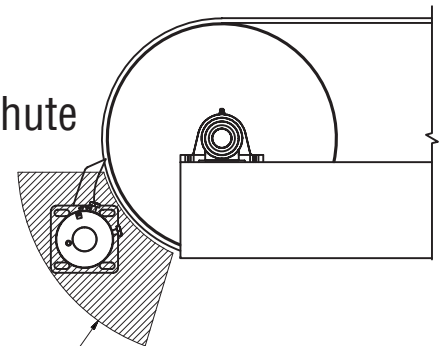
Inspect the conveyor head pulley. If there is a chute surrounding the head pulley continue to Step 2. A conveyor without a chute will require either mounting plates or a universal telescopic mount.

Conveyor with Chute



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

Conveyor without Chute

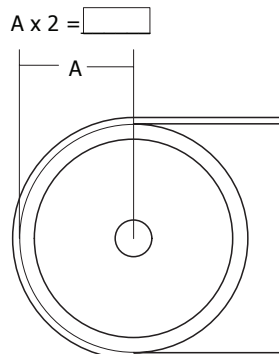


You will need to bridge the gap between conveyor and proper location needed for belt cleaner installation

*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.



A x 2 =

Gap Dimension Chart

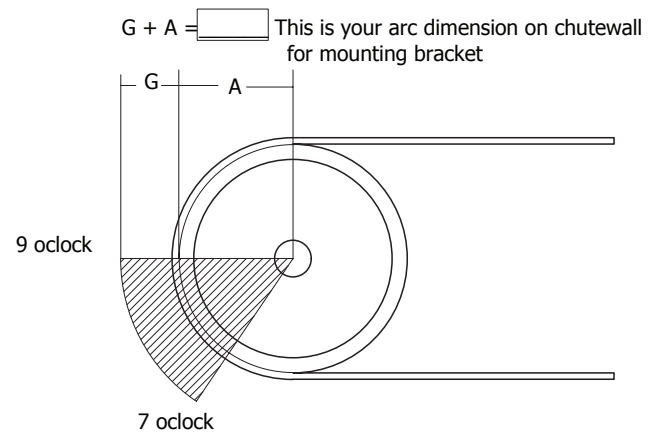
PULLEY DIAMETER	GAP
6" - 12"	3-1/2"
14" - 30"	3"
36" +	2-1/2"
TOLERANCES + OR - 1/4"	

Your Gap Dimension

MECT5HP 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.

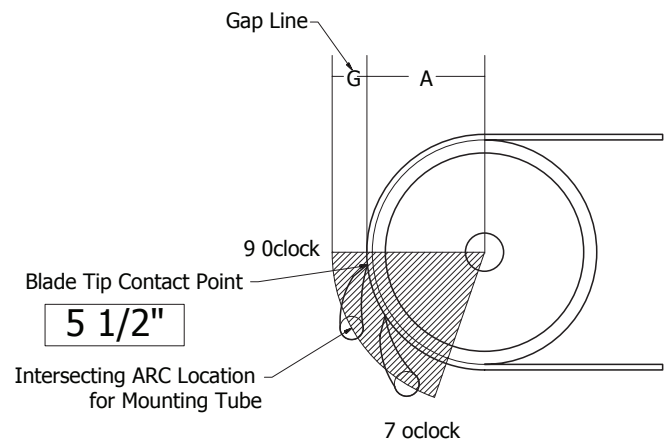


Step 4.

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

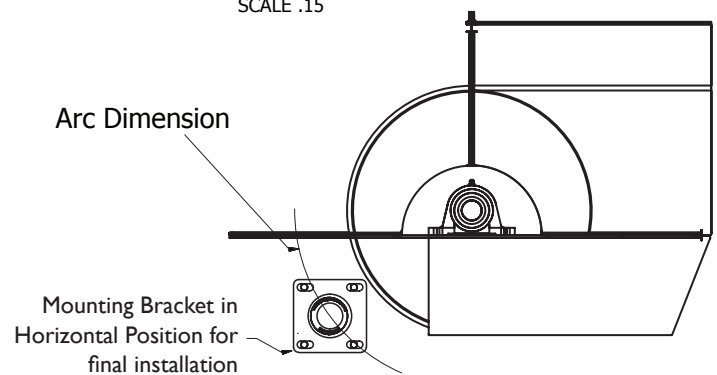
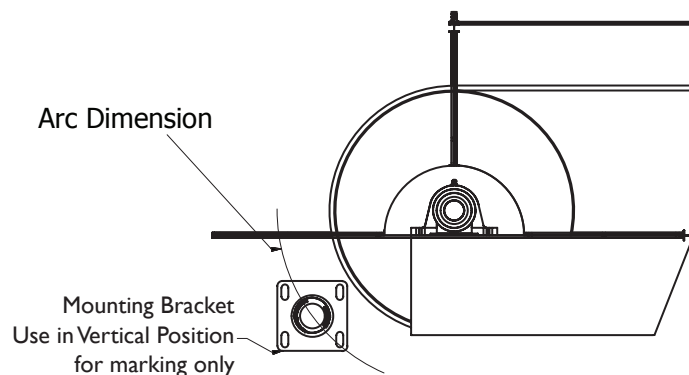
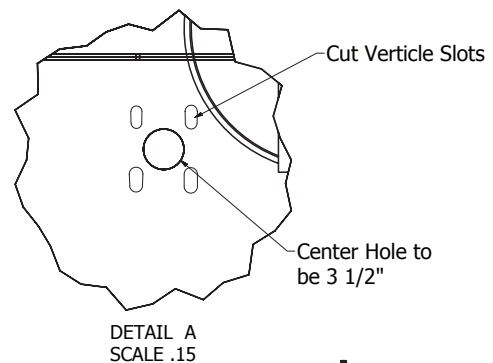
NEVER PLACE THE BLADE IN THE MATERIAL PATH

After picking the blade tip contact point, measure 5-1/2" 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.

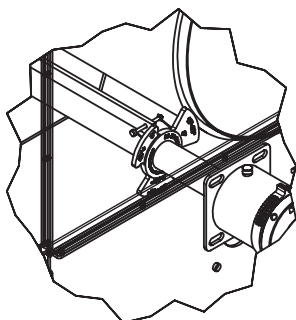


MECT5HP INSTALLATION INSTRUCTIONS

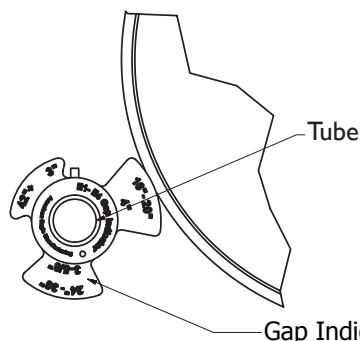
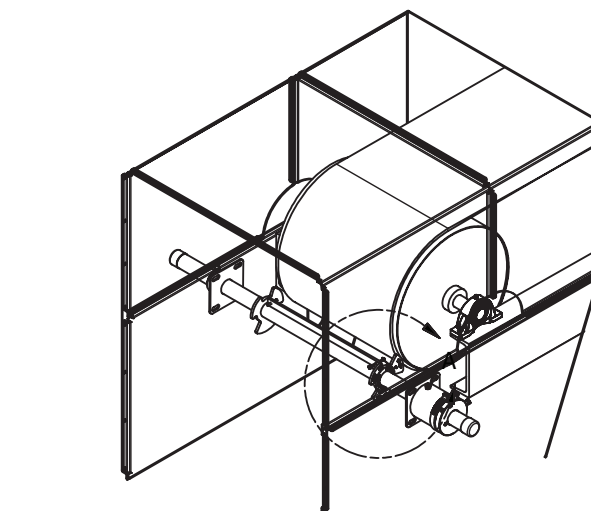
Step 6.

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.

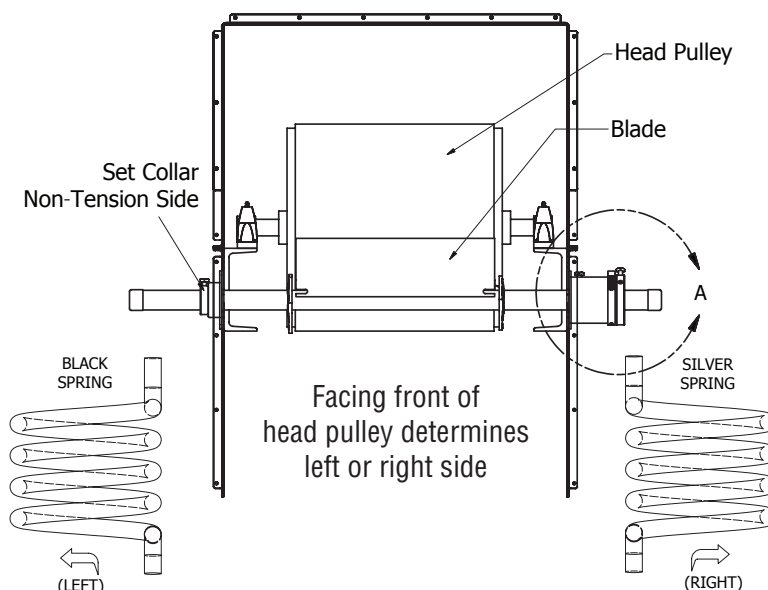


Gap Dimension Chart	
PULLEY DIAMETER	GAP
6" - 12"	3-1/2"
14" - 30"	3"
36" +	2-1/2"
TOLERANCES + OR - 1/4"	

Your Gap Dimension

Step 7.

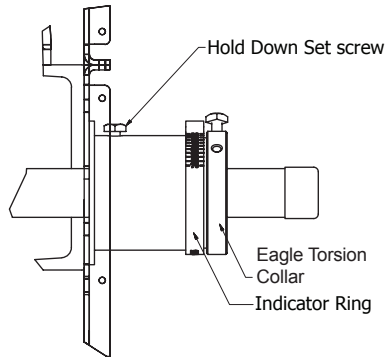
Center the blade on the head pulley and install the set collar on non-tension side. Install the tensioning spring (silver spring for right side, black spring for left side) as pictured. Install eagle torsion collar and tension indicator ring.



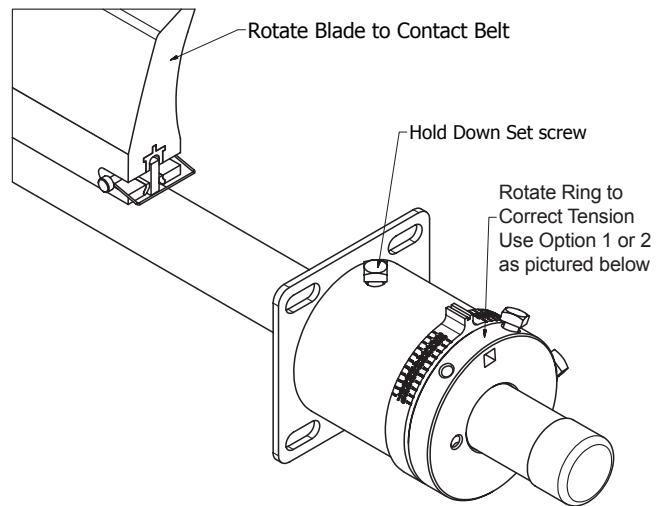
MECT5HP INSTALLATION INSTRUCTIONS

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.

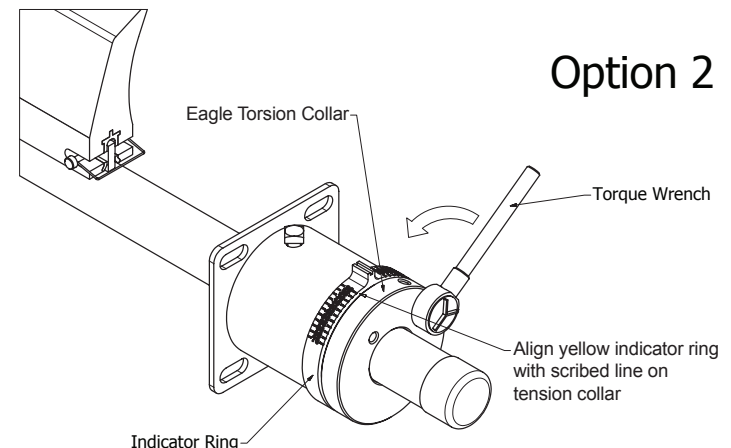
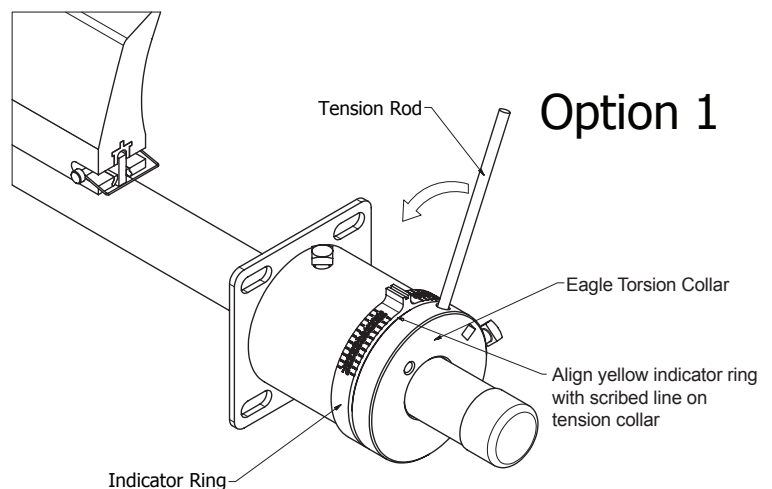
Step 10.

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.



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.



American Eagle Manufacturing LLC
1 866 713 8985
252 633 0603
New Bern, North Carolina 28562
AmericanEagleManufacturing.com