EZP-LS "Limited Space" Stainless Steel Precleaner with White ConShear™ LS Blade

Installation, Operation and Maintenance Manual

FLEXCO

EZP-LS Stainless Steel Precleaner with White ConShear™ LS Blade

Serial Number: _____

Purchase Date:_____

Purchased From: _____

Installation Date:_____

Serial number information can be found on the Serial Number Label included in the Information Packet found in the cleaner carton.

This information will be helpful for any future inquiries or questions about belt cleaner replacement parts, specifications or troubleshooting.

Table of Contents

Section 1 – Important Information

1.1 General Introduction

We at Flexco are very pleased that you have selected an EZP-LS Stainless Steel Precleaner with White ConShear™ LS Blade for your conveyor system.

This manual will help you to understand the operation of this product and assist you in making it work up to its maximum efficiency over its lifetime of service.

It is essential for safe and efficient operation that the information and guidelines presented be properly understood and implemented. This manual will provide safety precautions, installation instructions, maintenance procedures and troubleshooting tips.

If, however, you have any questions or problems that are not covered, please contact your field representative or our Customer Service Department.

Visit www.flexco.com for other Flexco locations and products.

Please read this manual thoroughly and pass it on to any others who will be directly responsible for installation, operation and maintenance of this cleaner. While we have tried to make the installation and service tasks as easy and simple as possible**, it does however require correct installation and regular inspections and adjustments to maintain top working condition.**

1.2 User Benefits

Correct installation and regular maintenance will provide the following benefits for your operation:

- Reduced conveyor downtime
- Reduced man-hour labor
- Lower maintenance budget costs
- Increased service life for the belt cleaner and other conveyor components

1.3 Service Option

The EZP-LS Stainless Steel Precleaner with White ConShear™ LS Blade is designed to be easily installed and serviced by your on-site personnel. However, if you would prefer complete turn-key factory service, please contact your local Flexco Field Representative.

Section 2 – Safety Considerations and Precautions

Before installing and operating the EZP-LS Stainless Steel Precleaner with White ConShear™ LS Blade, it is important to review and understand the following safety information.

There are set-up, maintenance and operational activities involving both **stationary** and **operating** conveyors. Each case has a safety protocol.

2.1 Stationary Conveyors

The following activities are performed on stationary conveyors:

- Installation
- Tension adjustments
- Blade replacement
- Cleaning
- Repairs

⚠ DANGER

It is imperative that OSHA/MSHA Lockout/Tagout (LOTO) regulations, 29 CFR 1910.147, be followed before undertaking the preceding activities. Failure to use LOTO exposes workers to uncontrolled behavior of the belt cleaner caused by movement of the conveyor belt. Severe injury or death can result.

Before working:

- Lockout/Tagout the conveyor power source.
- Disengage any takeups.
- Clear the conveyor belt or clamp securely in place.

⚠ WARNING

Use Personal Protective Equipment (PPE):

- Safety eyewear
- Hardhats
- Safety footwear

Close quarters, springs and heavy components create a worksite that compromises a worker's eyes, feet and skull. PPE must be worn to control the foreseeable hazards associated with conveyor belt cleaners. Serious injuries can be avoided.

2.2 Operating Conveyors

There are two routine tasks that must be performed while the conveyor is running:

- Inspection of the cleaning performance.
- Dynamic troubleshooting.

⚠ DANGER

Every belt cleaner is an in-running nip hazard. Never touch or prod an operating cleaner. Cleaner hazards cause instantaneous amputation and entrapment.

⚠ WARNING

Belt cleaners can become projectile hazards. Stay as far from the cleaner as practical and use safety eyewear and headgear. Missiles can inflict serious injury.

⚠ WARNING

Never adjust anything on an operating cleaner. Unforseeable belt projections and tears can catch on cleaners and cause violent movements of the cleaner structure. Flailing hardware can cause serious injury or death.

Section 3 – Pre-installation Checks and Options

3.1 Checklist

- Check that the cleaner size is correct for the beltline width.
- Check the belt cleaner carton and make sure all the parts are included.
- Review the "Tools Needed" list on the top of the installation instructions.
- Check the conveyor site:
  - Will the cleaner be installed on a chute?
  - Is the install on an open head pulley requiring mounting structure?
  - Are there obstructions that may require cleaner location adjustments? (see 3.2 - Cleaner Location Adjustments)

Section 3 – Pre-installation Checks and Options

3.2 Cleaner Location Adjustments

In certain applications it is necessary to modify the location of the precleaner pole due to permanent obstacles that obstruct the desired location. Relocating the pole location can be done easily and does not hinder the performance of the cleaner as long as the "C" dimension is maintained.

NOTE: In the following example we will be lowering the pole location in the "Y" direction, but the same method could also be applied in the "X" direction.

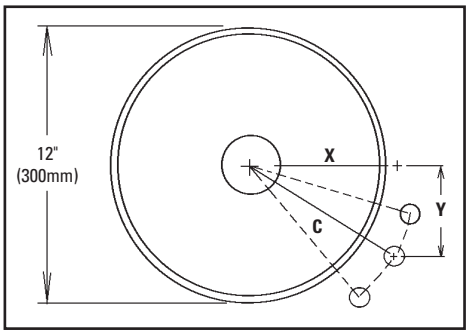
Conveyor situation:

Pulley Diameter: 12" (300 mm)

X = 6 1/8" (155 mm)

Y = 5 1/2" (140 mm)

C = 8 1/4" (210 mm)



1. **Determine the given location dimensions and define the change needed.** After laying out the given X & Y dimensions, determine the distance of the modification required for adequate clearance of the pole and tensioning system. (In the example we decide to lower the pole 2" (50 mm) to clear the support structure).

2. **Write down known dimensions.** We can now determine two of the three required dimensions which will allow us to find the third. We know we cannot alter the "C" dimension, so this will remain the same. Also we are required to lower the unit in the "Y" dimension 2" (50 mm), so we add 2" (50 mm) to the given "Y" dimension.

   X = ?

   Y = 5 1/2 + 2 = 7 1/2" (140 + 50 = 190 mm)

   C = 8 1/4" (210 mm)

3. **Determine final dimension.** On a flat vertical surface, using a level, draw one horizontal line and one vertical line, creating a right triangle (Fig 3a). Measure down from the intersection the determined "Y" dimension and mark (Fig 3b). With the tape measure starting at the modified "Y" mark, swing the tape across the "X" line and mark at the "C" dimension where it crosses the "X" line (Fig 3c). Measure from the intersection to the "C" intersection and this will be your new "X" dimension (Fig. 3d).

   X = 3 1/2" (89 mm)

   Y = 7 1/2" (190 mm)

   C = 8 1/4" (210 mm)

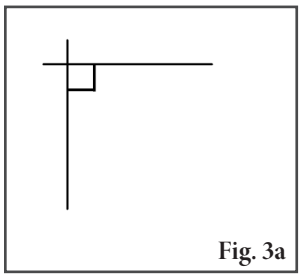


Fig. 3a

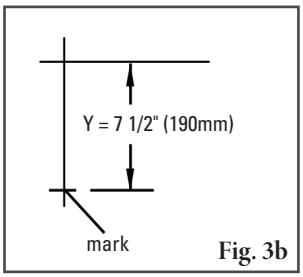


Fig. 3b

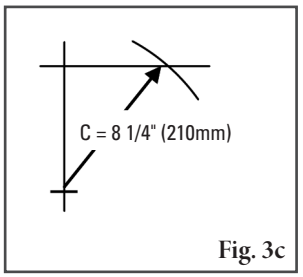


Fig. 3c

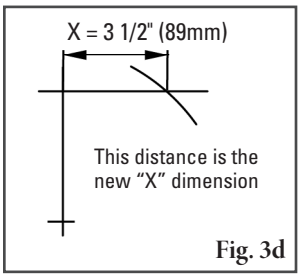


Fig. 3d

Section 3 – Pre-Installation Checks and Options

3.4 Correct Blade Installation and Tensioning

For optimal cleaning efficiency and long wear life, the ConShear™ blade must be located and tensioned correctly on the belt head pulley. If the cleaner pole is in the wrong location the performance of the new blade may be adversely affected. See “Possible Problems" below. For tensioning, please follow these instructions.

Correct Location:

When blade contact is made against the head pulley (prior to tensioning), there should be a 1/16–1/8" (2–3mm) gap at the bottom of the blade face (Fig. 1).

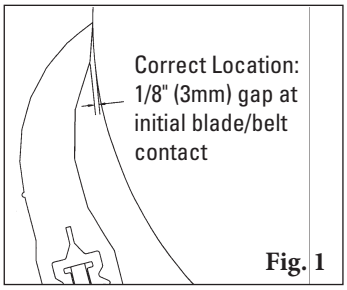


Fig. 1

Possible Problems:

- Pole location too far out - The initial blade/belt contact gap will be larger than 1/8" (3mm) (Fig. 2). If the blade is correctly tensioned it may flip through before it is fully worn. If tensioned too lightly, it will develop the “smile effect” quickly and not clean properly.
- Pole location too far in - If there is no gap at the initial blade/belt contact (Fig. 3), the tip of the blade may not be touching the belt. In this case, the blade will push away and lose its shearing (cleaning) effect. The blade may also develop a flap at the tip which may trap material.

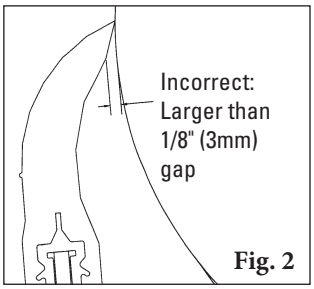


Fig. 2

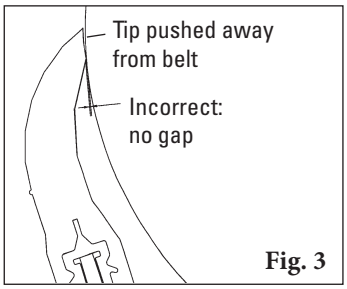


Fig. 3

Correct Tensioning:

The blade should be tensioned until the gap is gone (Fig. 4).

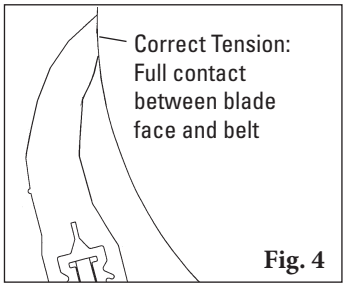
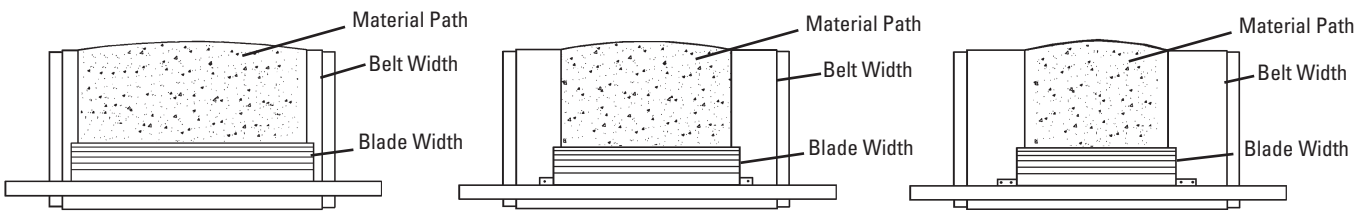


Fig. 4

The “Material Path” Option

For optimal cleaning and reduced blade retensioning, the cleaner blade width should be sized to fit the material path of the belt. The material path is typically the center 2/3 of the belt width. Choosing a blade only slightly wider than the material path can decrease differential blade wear which reduces blade retensioning maintenance, as well as reducing the frequency of blade replacement.

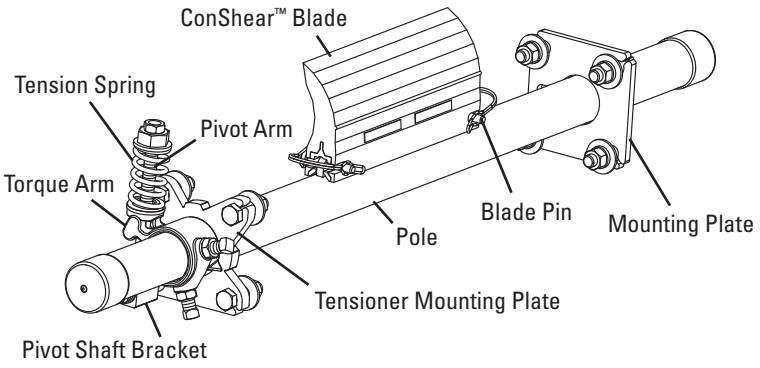
Match blade width to belt’s material path.



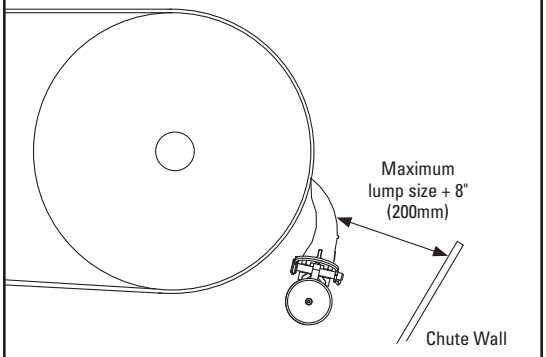
Belt Width Minus 2" (50mm) **Belt Width Minus 8" (200mm)** **Belt Width Minus 14" (350mm)**

Section 4 – Installation Instructions

4.1 EZP-LS Stainless Steel Precleaner



EZP-LS Stainless Steel Precleaner Parts List



Recommended Spacing from Chute Wall

PHYSICALLY LOCK OUT AND TAG THE CONVEYOR AT THE POWER SOURCE BEFORE YOU BEGIN CLEANER INSTALLATION.

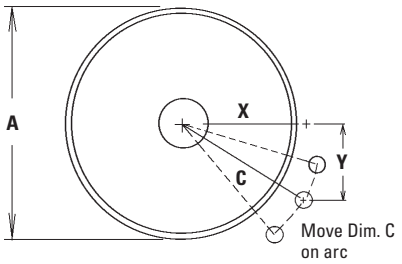
Tools Needed:

- 1-1/8" (28mm) Wrench
- 3/4" (19mm) Wrench
  OR Large Adjustable/Crescent Wrench
- Ratchet with 3/4" (19mm) Socket
- Adjustable pliers
- Torch or welder (as needed)
- Tape Measure
- Level
- Marking pen or soapstone
- Wire brush & small putty knife (for cleaning pole)

1. Locate the correct pole position. Measure and determine Dimension A (see instructions above). Find Dimension A on the Pole Location Chart at right and determine Dimensions X, Y and C. Measure out horizontally from the center of the pulley shaft Dim. X and mark. From that mark, draw a long vertical line down, then measure and mark Dim. Y. This indicates the location of the center of the cleaner pole. Measure and mark both sides.

   NOTE: If the location is obstructed, use Dim. C and move on an arc from the center of the pulley shaft to find an open position. Dim. C must remain constant to correctly locate the pole (see drawing above).

   NOTE: For open head installs, first add mounting support materials to the structure.



A = Pulley Diameter + Lagging and Belt
C = Critical Spec to move location if necessary

Pole Location Specs

Pole Location Chart

A		X		Y		C	
in.	mm	in.	mm	in.	mm	in.	mm
6	150	2 5/8	65	5 1/2	140	6 1/8	150
7	175	3 1/4	81	5 1/2	140	6 3/8	155
8	200	3 7/8	96	5 1/2	140	6 3/4	162
9	225	4 3/8	109	5 1/2	140	7	171
10	250	5	125	5 1/2	140	7 3/8	179
11	275	5 1/2	138	5 1/2	140	7 3/4	189
12	300	6 1/8	153	5 1/2	140	8 1/4	198
13	325	6 5/8	166	5 1/2	140	8 5/8	209
14	350	7 1/8	178	5 1/2	140	9	219
15	375	7 5/8	191	5 1/2	140	9 3/8	229
16	400	8 1/4	206	5 1/2	140	9 7/8	239
17	425	8 3/4	219	5 1/2	140	10 3/8	252
18	450	9 1/4	231	5 1/2	140	10 3/4	263
19	475	9 3/4	244	5 1/2	140	11 1/4	273
20	500	10 1/4	256	5 1/2	140	11 5/8	284
21	525	10 3/4	269	5 1/2	140	12 1/8	295
22	550	11 1/4	281	5 1/2	140	12 1/2	307

Section 4 – Installation Instructions

4.1 EZP-LS Stainless Steel Precleaner

2. **Mark and cut the mounting plate holes.** Using the template provided in the instruction packet, position the pole access hole on the chute, aligning the hole notches with the layout lines. Position the keyway toward the pulley. Trace the pole cutout and mounting holes (Fig. 1). Cut the holes on both sides of the chute.

   NOTE: Hole cutouts are slotted for later adjustment if needed.

3. **Install the mounting plates.** Bolt the tensioner mounting plate on the side with the tensioner (Fig. 2) and the pole mounting plate on the opposite side (Fig. 2a). Center the plates on the slotted holes and tighten the bolts.

4. **Install the pole.** Remove both blade pins and the blade from the pole (Fig. 3), and insert the pole through both mounting plates (Fig. 3a).

5. **Center the cleaner on the belt.** Reinstall the blade with both blade pins. Center the blade on the belt (Fig. 4). Rotate the blade up to the belt and check to insure that the blade is square to the pulley face. If it is not, loosen a mounting plate on one side and adjust the plate forward or backward to square the blade to the pulley, and retighten the bolts (Fig. 4a.)

6. **Install the tensioner.** Slide the torque arm onto the pole (Fig. 5).

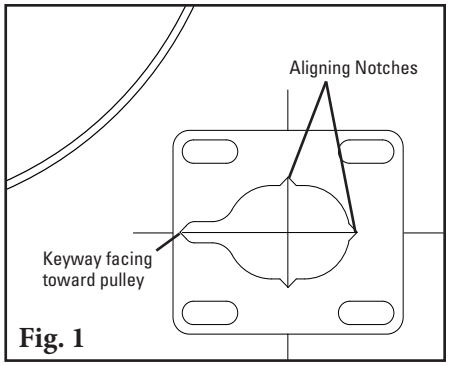


Fig. 1

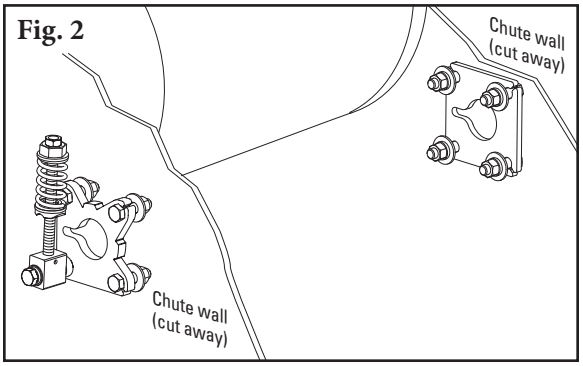


Fig. 2

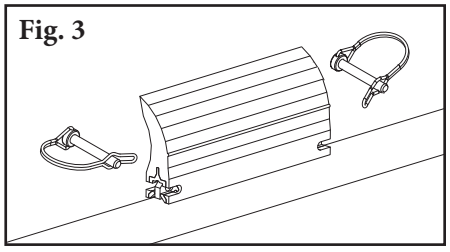


Fig. 3

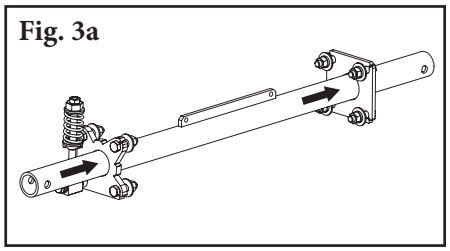


Fig. 3a

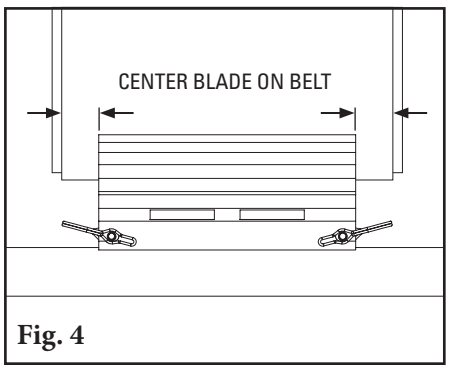


Fig. 4

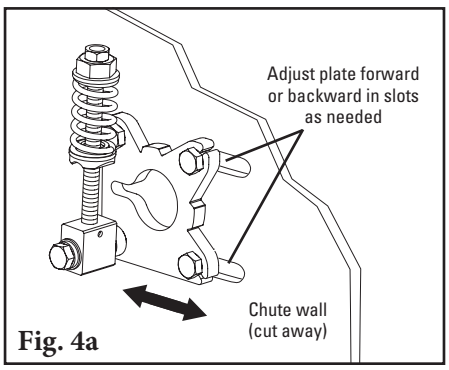


Fig. 4a

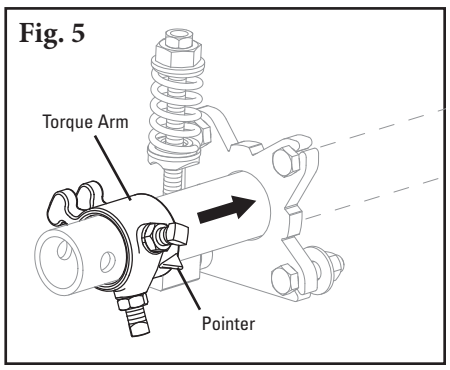


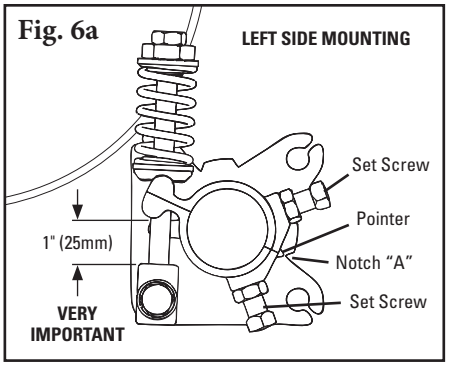
Fig. 5

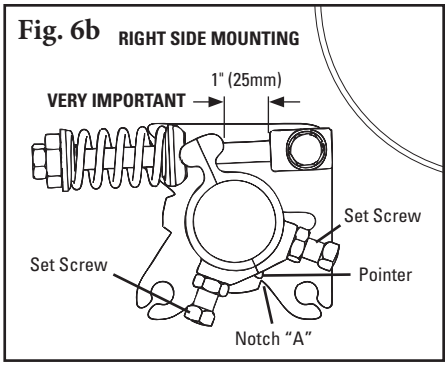
Section 4 – Installation Instructions

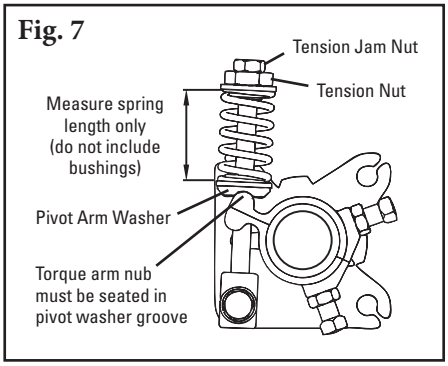
4.1 EZP-LS Stainless Steel Precleaner

IMPORTANT: To ensure the torque arm is installed correctly, note that it must fit snugly up to the mounting plate and the pointer **must** be to the inside.

To correctly position the torque arm, rotate the pole until the blade contacts the belt. Then align the torque arm pointer to notch "A" (Fig. 6a or 6b). There will be a 1" (25 mm) gap between the pivot block and the torque arm nub if the tensioner is installed correctly. While holding the blade firmly against the belt, tighten the set screws.







7. **Set the blade tension.** Make sure that the nubs on the torque arm are seated into the groove in the pivot washer (Fig. 7). Turn the tension nut so that enough pressure is applied to keep the pivot washer seated in the torque arm. Turn the nuts until the required spring length is achieved, see the Spring Length Chart. Tighten the jam nut.

8. **Confirm the correct pole location.** After the cleaner is installed, slide the Pole Location Gauge (provided in the instruction packet) between the pole and the pulley until it stops at a step (Fig. 8). Read the flat area where the pole is resting (Fig. 8a). This diameter reading should be equal to Dim. A used in Step 1.

   NOTE: If the diameter reading on the Pole Location Gauge does not read the same as in Step 1, check the "C" dimension and correct accordingly.

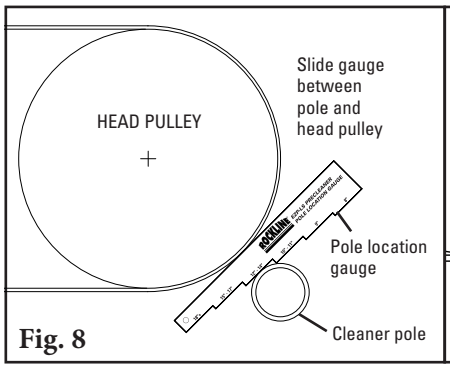
9. **Add pole caps.** Put a urethane cap on each pole end.

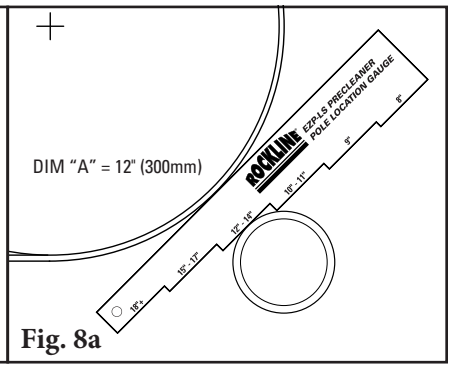
Test run the cleaner. Run the conveyor for at least 15 minutes and inspect the cleaning performance. Check the spring length for proper tensioning. Make adjustments as necessary.

LST Spring Length Chart

Blade Width		Black Springs		White Springs		Dual White Springs	
in.	mm	in.	mm	in.	mm	in.	mm
10	250	3 1/2	89	3 3/4	95	3 7/8	98
16	400	3 1/4	83	3 5/8	92	3 7/8	98
22	550	2 7/8	73	3 1/2	89	3 3/4	95
28	700	2 5/8	67	3 3/8	86	3 3/4	95
34	850	N/A	N/A	3 1/4	83	3 5/8	92
40	1000	N/A	N/A	3 1/8	79	3 5/8	92
46	1150	N/A	N/A	3	76	3 1/2	89
52	1300	N/A	N/A	N/A	N/A	3 1/2	89
58	1450	N/A	N/A	N/A	N/A	3 3/8	86

Shading indicates preferred spring option.





Section 5 – Pre-Operation Checklist and Testing

5.1 Pre-Op Checklist

- Recheck that all fasteners are tightened properly.
- Add pole caps.
- Apply all supplied labels to the cleaner.
- Check the blade location on the belt.
- Be sure that all installation materials and tools have been removed from the belt and the conveyor area.

5.2 Test Run the Conveyor

- Run the conveyor for at least 15 minutes and inspect the cleaning performance.
- Check the tensioner spring for recommended length (proper tensioning).
- Make adjustments as necessary.

  NOTE: Observing the cleaner when it is running and performing properly will help to detect problems or when adjustments are needed later.

Section 6 – Maintenance

Flexco belt cleaners are designed to operate with minimum maintenance. However, to maintain superior performance some service is required. When the cleaner is installed a regular maintenance program should be set up. This program will ensure that the cleaner operates at optimal efficiency and problems can be identified and fixed before the cleaner stops working.

All safety procedures for inspection of equipment (stationary or operating) must be observed. The EZP-LS Stainless Steel Precleaner with White ConShear™ Blade operates at the discharge end of the conveyor and is in direct contact with the moving belt. Only visual observations can be made while the belt is running. Service tasks can be done only with the conveyor stopped and by observing the correct lockout/tagout procedures.

6.1 New Installation Inspection

After the new cleaner has run for a few days a visual inspection should be made to ensure the cleaner is performing properly. Make adjustments as needed.

6.2 Routine Visual Inspection (every 2-4 weeks)

A visual inspection of the cleaner and belt can determine:

- If the spring length is the correct length for optimal tensioning.
- If the belt looks clean or if there are areas that are dirty.
- If the blade is worn out and needs to be replaced.
- If there is damage to the blade or other cleaner components.
- If fugitive material is built up on the cleaner or in the transfer area.
- If there is cover damage to the belt.
- If there is vibration or bouncing of the cleaner on the belt.
- If a snub pulley is used, a check should be made for material buildup on the pulley.

If any of the above conditions exist, a determination should be made on when the conveyor can be stopped for cleaner maintenance.

6.3 Routine Physical Inspection (every 6-8 weeks)

When the conveyor is not in operation and properly locked and tagged out a physical inspection of the cleaner to perform the following tasks:

- Clean material buildup off of the cleaner blade and pole.
- Closely inspect the blade for wear and any damage. Replace if needed.
- Check both blade pins for proper installation and condition. Replace if needed.
- Ensure full blade to belt contact.
- Inspect the cleaner pole for damage.
- Inspect all fasteners for tightness and wear. Tighten or replace as needed.
- Replace any worn or damaged components.
- Check the tension of the cleaner blade to the belt. Adjust the tension if necessary using the chart on the cleaner or the one on page 11.
- When maintenance tasks are completed, test run the conveyor to ensure the cleaner is performing properly.

Section 6 – Maintenance

6.4 Blade Replacement Inspection

The EZP-LS Stainless Steel Precleaner with White ConShear™ Blade has a built-in blade wear gauge to make it easy to determine when the blade is worn out and needs to be replaced. A pointer on the torque arm is set up when a new blade is installed to point at "Notch A" on the mounting plate (Fig. A). When the blade is worn out the pointer will point to "Notch B" (Fig. B).

If the pointer is difficult to see, you can also check the blade wear by looking at the gap between the torque arm nub and the pivot block. At new blade install, the gap will be 1" (25 mm) (Fig. C). When the blade is completely worn out and needs to be changed, there will be no gap (Fig. D).

Fig. A TENSIONER AT BLADE INSTALL

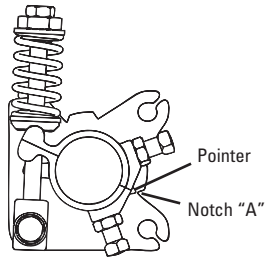


Fig. B TENSIONER WHEN BLADE IS WORN

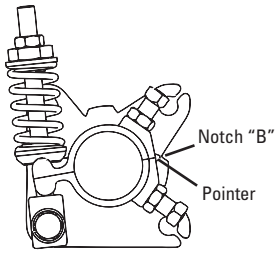


Fig. C TENSIONER AT BLADE INSTALL

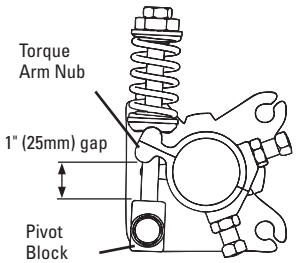
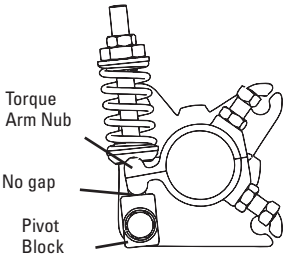
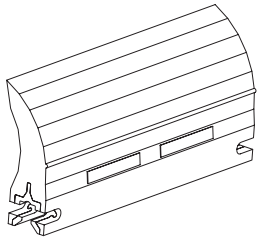


Fig. D TENSIONER WHEN BLADE IS WORN



6.5 Blade Replacement Instructions



ConShear™ LS Replacement Blade

Tools Needed:

- 1-1/8" (28mm) Wrench
- 1-3/4" (45mm) Wrench
  OR Large Adjustable/Crescent Wrench
- Tape Measure
- Wire brush & small putty knife (for cleaning pole)

PHYSICALLY LOCK OUT AND TAG THE CONVEYOR AT THE POWER SOURCE BEFORE YOU BEGIN CLEANER INSTALLATION.

1. **Remove the tension.** Move both tension nuts to the end of the pivot rod (Fig. 1). Move the pivot rod and spring from the torque arm so the nub disengages from the pivot washer. The pole can now rotate down freely. This releases the tension of the blade on the belt.

2. **Remove the worn blade.** Remove one blade pin and remove the blade from the pole (Fig. 2). Clean all fugitive material from the pole.

   NOTE: If blade is hard to remove use a screwdriver or hammer to loosen it and then remove.

3. **Install the new blade.** Slide the new blade onto the pole, locking it into the far blade pin, then reinstall the removed blade pin (Fig. 3).

   NOTE: Be sure the blade pin head is installed facing the belt.

Fig. 1

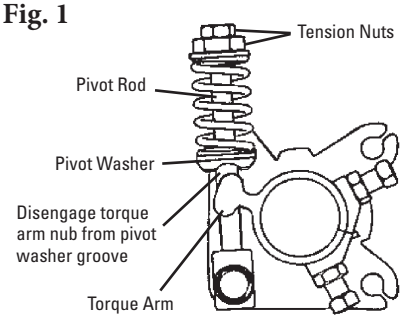


Fig. 2

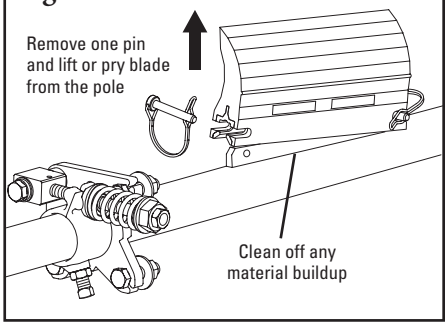
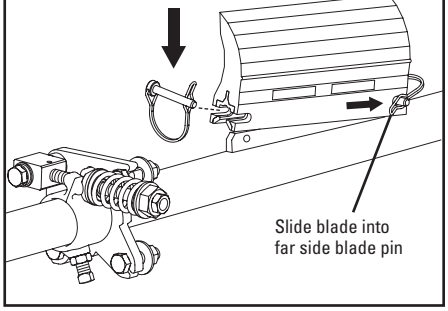


Fig. 3



6.5 Blade Replacement Instructions

4. **Reset the correct blade tension.** While holding the blade against the belt, make sure the pointer is pointing to Notch "A" and that there is a 1" (25 mm) gap between the pivot block and the torque arm nub (Fig. 4). Re-engage the pivot rod washer groove with the nub on the torque arm and turn the tension nuts until the correct spring length is achieved (Fig. 4a). Measure the length of the spring only (do not include the bushings).

   Test run the cleaner. Run the conveyor for at least 15 minutes and inspect the cleaning performance. Check the spring length for proper tensioning. Make adjustments as necessary.

Fig. 4

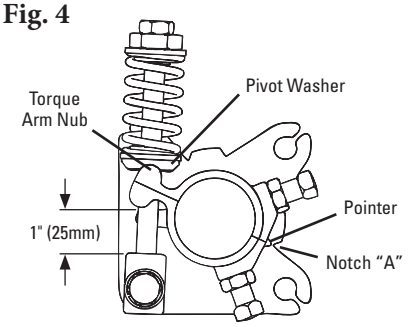
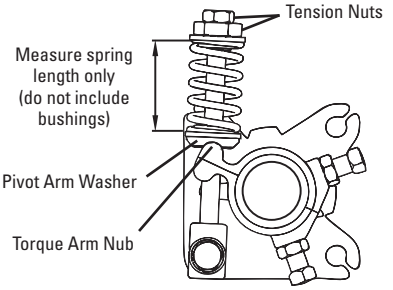


Fig. 4a



LST Spring Length Chart

Blade Width		Black Springs		White Springs		Dual White Springs	
in.	mm	in.	mm	in.	mm	in.	mm
10	250	3 1/2	89	3 3/4	95	3 7/8	98
16	400	3 1/4	83	3 5/8	92	3 7/8	98
22	550	2 7/8	73	3 1/2	89	3 3/4	95
28	700	2 5/8	67	3 3/8	86	3 3/4	95
34	850	N/A	N/A	3 1/4	83	3 5/8	92
40	1000	N/A	N/A	3 1/8	79	3 5/8	92
46	1150	N/A	N/A	3	76	3 1/2	89
52	1300	N/A	N/A	N/A	N/A	3 1/2	89
58	1450	N/A	N/A	N/A	N/A	3 3/8	86

Shading indicates preferred spring option.

6.6 Maintenance Log

Conveyor Name/No. _____

Date: _____ Work done by: _____ Service Quote #: _____

Activity: _____

Date: _____ Work done by: _____ Service Quote #: _____

Activity: _____

Date: _____ Work done by: _____ Service Quote #: _____

Activity: _____

Date: _____ Work done by: _____ Service Quote #: _____

Activity: _____

Date: _____ Work done by: _____ Service Quote #: _____

Activity: _____

Date: _____ Work done by: _____ Service Quote #: _____

Activity: _____

Date: _____ Work done by: _____ Service Quote #: _____

Activity: _____

Date: _____ Work done by: _____ Service Quote #: _____

Activity: _____

Section 6 – Maintenance

6.7 Cleaner Maintenance Checklist

Site: _____ **Inspected by**: _____ **Date:** _____

Belt Cleaner: _____ **Serial Number:** _____

Blade Width: ☐ Belt minus 2" (50mm) ☐ Belt minus 8" (200mm)

Beltline Information:

Beltline Number: _____ Belt Condition: _____

Belt Width: ☐ 300mm (12") ☐ 450mm (18") ☐ 600mm (24") ☐ 750mm (30") ☐ 900mm (36") ☐ 1050mm (42") ☐ 1200mm (48") ☐ 1350mm (54") ☐ 1500mm (60")

*Head Pulley Diameter (Belt & Lagging):*_____ Belt Speed:_____ fpm Belt Thickness: _____

Belt Splice:_____ Condition of Splice:_____ Number of Splices:_____ ☐ Skived ☐ Unskived

Material conveyed: _____

Days per week run:_____ Hours per day run:_____

Blade Life:

Date blade installed:_____ Date blade inspected:_____ Estimated blade life:_____

Is blade making complete contact with belt? ☐ Yes ☐ No

Distance from wear line: Left _____ Middle _____ Right _____

Blade condition: ☐ Good ☐ Grooved ☐ Smiled ☐ Not contacting belt ☐ Damaged

Measurement of spring: Required _____ Currently _____

Was Cleaner Adjusted: ☐ Yes ☐ No

Pole Condition: ☐ Good ☐ Bent ☐ Worn

Lagging: ☐ Side Lag ☐ Ceramic ☐ Rubber ☐ Other ☐ None

Condition of lagging: ☐ Good ☐ Bad ☐ Other _____

Cleaner's Overall Performance: (Rate the following 1 - 5, 1= very poor - 5 = very good)

Appearance: ☐ Comments:_____

Location: ☐ Comments:_____

Maintenance: ☐ Comments:_____

Performance: ☐ Comments:_____

Other comments: _____

_____

_____

_____

Section 7 – Troubleshooting

Problem	Possible Cause	Possible Solutions
Poor cleaning performance	Cleaner under-tensioned	Adjust to correct tension - see spring length chart
	Cleaner over-tensioned	Adjust to correct tension - see spring length chart
	Cleaner installed in wrong location	Verify "C" dimension, relocate to correct dimension
	Cleaner blade worn or damaged	Replace cleaner blade
Rapid Blade Wear	Tension on cleaner too high/low	Adjust to correct tension - see spring length chart
	Cleaner not located correctly	Check cleaner location for correct dimensions
	Blade attack angle incorrect	Check cleaner location for correct dimensions
	Material too abrasive for blade	Option: switch to alternate cleaner with metal blades
	Mechanical splice damaging blade	Repair, skive or replace splice
Center wear on blade (smile effect)	Blade wider than material path	Replace blade with width to match material path
	Tension on cleaner too high/low	Adjust to correct tension - see spring length chart
Unusual wear or damage to blade	Mechanical splice damaging blade	Repair, skive or replace splice
	Belt damaged or ripped	Repair or replace belt
	Cleaner not correctly located	Verify "C" dimension, relocate to correct dimension
	Damage to pulley or pulley lagging	Repair or replace pulley
Vibration or noise	Cleaner not located correctly	Verify "C" dimension, relocate to correct dimension
	Blade attack angle incorrect	Verify "C" dimension, relocate to correct dimension
	Cleaner running on empty belt	Use a spray pole when the belt is empty
	Cleaner tension too high/low	Adjust to correct tension or slight adjust to diminish
	Cleaner locking bolts not secure	Check and tighten all bolts and nuts
	Cleaner not square to head pulley	Verify "C" dimension, relocate to correct dimension
	Material buildup in chute	Clean up build-up on cleaner and in chute
Cleaner being pushed away from pulley	Cleaner tension not set correctly	Ensure correct tension/increase tension slightly
	Sticky material is overburdening cleaner	Increase tension; replace with cleaner with metal tips; replace with larger size cleaner
	Cleaner not set up correctly	Confirm location dimensions are equal on both sides

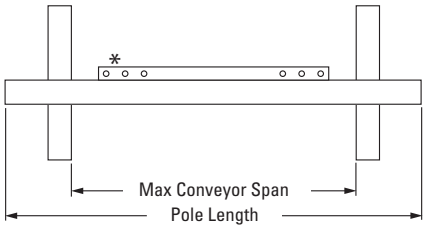
Section 8 – Specs and CAD Drawings

8.1 Specs and Guidelines

Pole Length Specifications

CLEANER SIZE		POLE LENGTH		MAXIMUM CONVEYOR SPAN	
in.	mm	in.	mm	in.	mm
12	300	42	1050	37	925
18	450	48	1200	43	1075
24	600	54	1350	49	1225
30	750	60	1500	55	1375
36	900	66	1650	61	1525
42	1050	72	1800	67	1675
48	1200	78	1950	73	1825
54	1350	88	2200	83	2075
60	1500	94	2350	89	2225

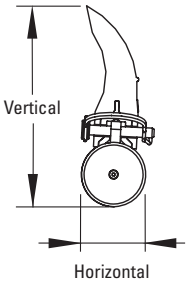
Pole Diameter - 1-7/8" (48 mm)



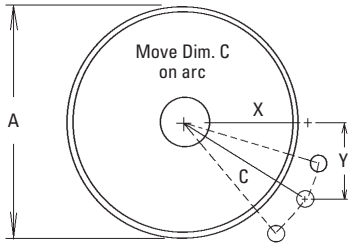
*Each pole size can be used with a blade size either belt width minus 2" (50 mm) or 8" (200 mm).

Clearance Guidelines for Installation

HORIZONTAL CLEARANCE REQUIRED		VERTICAL CLEARANCE REQUIRED	
in.	mm	in.	mm
3	75	6 1/2	165



Pole Location Specs

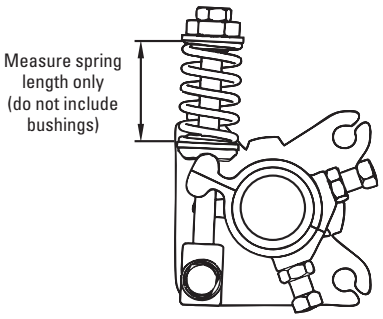


A = Pulley Diameter + Lagging and Belt
C = Critical Spec to move location if necessary

LST Spring Length Chart

Blade Width		Black Springs		White Springs		Dual White Springs	
in.	mm	in.	mm	in.	mm	in.	mm
10	250	3 1/2	89	3 3/4	95	3 7/8	98
16	400	3 1/4	83	3 5/8	92	3 7/8	98
22	550	2 7/8	73	3 1/2	89	3 3/4	95
28	700	2 5/8	67	3 3/8	86	3 3/4	95
34	850	N/A	N/A	3 1/4	83	3 5/8	92
40	1000	N/A	N/A	3 1/8	79	3 5/8	92
46	1150	N/A	N/A	3	76	3 1/2	89
52	1300	N/A	N/A	N/A	N/A	3 1/2	89
58	1450	N/A	N/A	N/A	N/A	3 3/8	86

Shading indicates preferred spring option.



Pole Location Chart

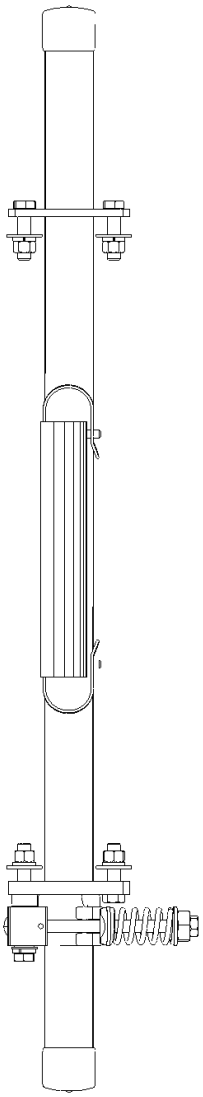
A		X		Y		C	
in.	mm	in.	mm	in.	mm	in.	mm
6	150	2 5/8	65	5 1/2	140	6 1/8	150
7	175	3 1/4	81	5 1/2	140	6 3/8	155
8	200	3 7/8	96	5 1/2	140	6 3/4	162
9	225	4 3/8	109	5 1/2	140	7	171
10	250	5	125	5 1/2	140	7 3/8	179
11	275	5 1/2	138	5 1/2	140	7 3/4	189
12	300	6 1/8	153	5 1/2	140	8 1/4	198
13	325	6 5/8	166	5 1/2	140	8 5/8	209
14	350	7 1/8	178	5 1/2	140	9	219
15	375	7 5/8	191	5 1/2	140	9 3/8	229
16	400	8 1/4	206	5 1/2	140	9 7/8	239
17	425	8 3/4	219	5 1/2	140	10 3/8	252
18	450	9 1/4	231	5 1/2	140	10 3/4	263
19	475	9 3/4	244	5 1/2	140	11 1/4	273
20	500	10 1/4	256	5 1/2	140	11 5/8	284
21	525	10 3/4	269	5 1/2	140	12 1/8	295
22	550	11 1/4	281	5 1/2	140	12 1/2	307

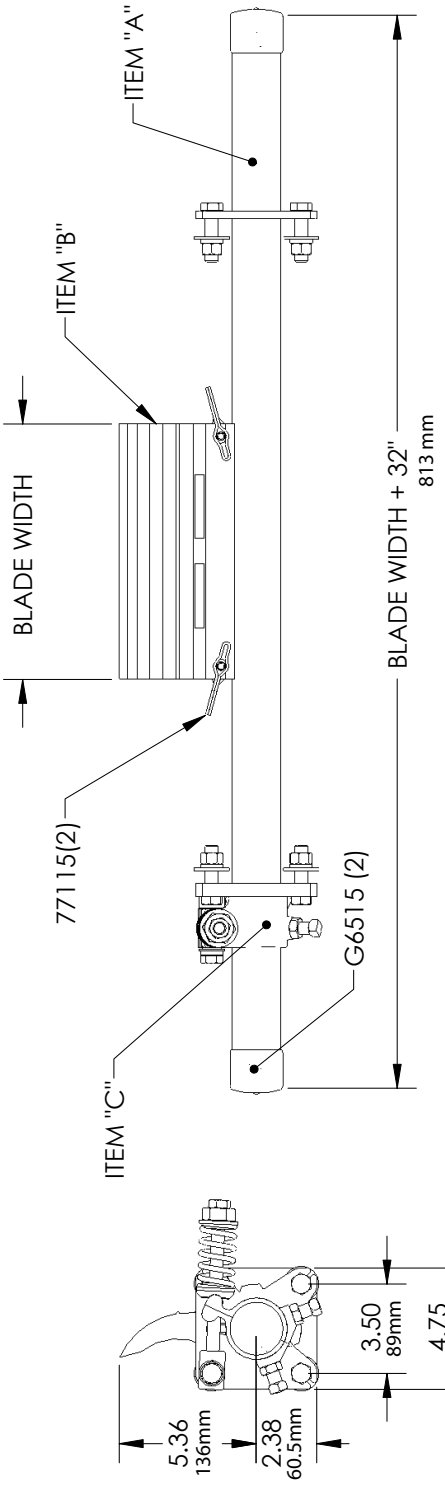
Specifications:

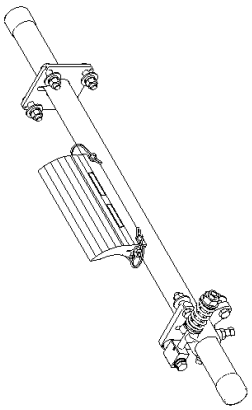
- Maximum Belt Speed .....500 FPM (2.5 m/s)
- Temperature Rating .....-30 to 180°F (-35 to 82°C)
- Minimum Pulley Diameter.....6" (150 mm)
- Blade Height.....4.5" (115 mm)
- Usable Blade Wear Length.....2-3/8" (60 mm)
- Blade Material .....Polyurethane (chemical resistant/food grade)
- Available for Belt Widths .....12 to 60" (300 to 1500 mm)
- CEMA Cleaner Rating .....Class 2

8.2 CAD Drawing - EZP-LS Stainless Steel - Belt Width Minus 2" (50 mm)

ASSEMBLY NUMBER	BELT WIDTH		BLADE WIDTH		ITEM "A"	ITEM "B"	ITEM "C"
	in.	mm	in.	mm			
77144	12	300	10	250	77079	77097	77124
77145	18	450	16	400	77080	77098	77124
77146	24	600	22	550	77081	77099	77124
77147	30	750	28	700	77082	77100	77124
77148	36	900	34	850	77083	77101	77125
77149	42	1050	40	1000	77084	77102	77125
77150	48	1200	46	1150	77085	77103	77125
77151	54	1350	52	1300	77086	77104	77126
77152	60	1500	58	1450	77087	77105	77126



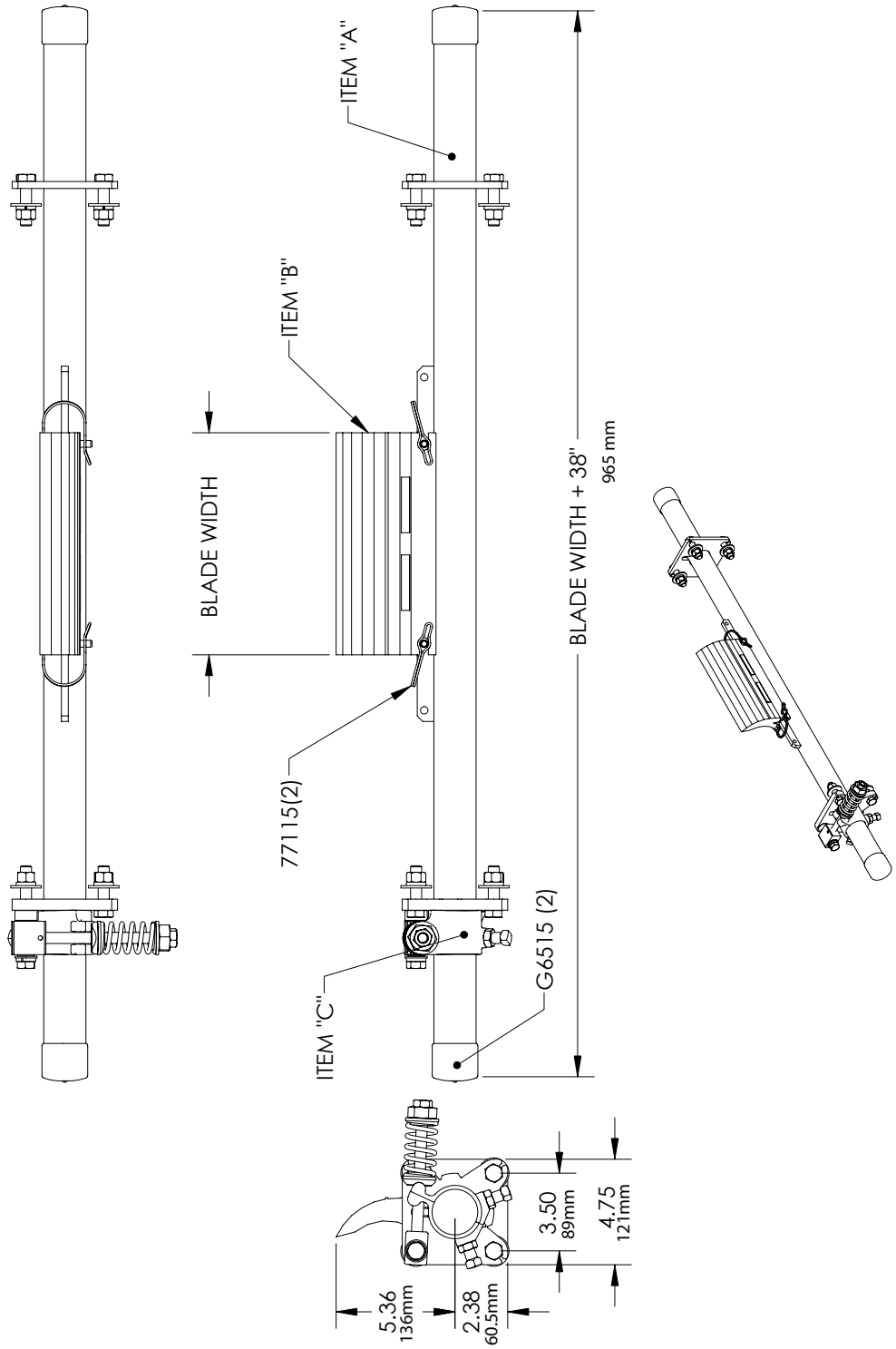




Section 8 – Specs and CAD Drawings

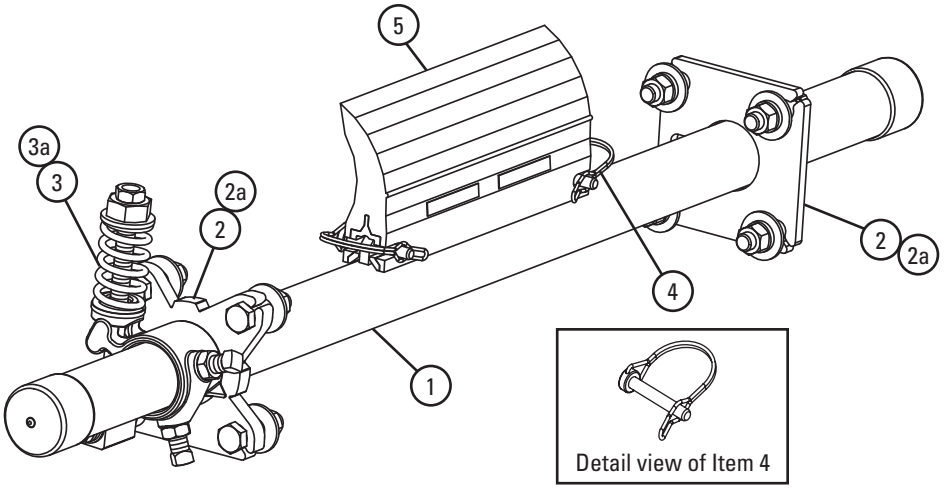
8.3 CAD Drawing - EZP-LS Stainless Steel - Belt Width Minus 8" (200 mm)

ASSEMBLY NUMBER	BELT WIDTH		BLADE WIDTH		ITEM "A"	ITEM "B"	ITEM "C"
	in.	mm	in.	mm			
77153	18	450	10	250	77080	77097	77124
77154	24	600	16	400	77081	77098	77124
77155	30	750	22	550	77082	77099	77124
77156	36	900	28	700	77083	77100	77124
77157	42	1050	34	850	77084	77101	77125
77158	48	1200	40	1000	77085	77102	77125
77159	54	1350	46	1150	77086	77103	77125
77160	60	1500	52	1300	77087	77104	77126



Section 9 – Replacement Parts

9.1 Replacement Parts List



Replacement Parts

REF	DESCRIPTION	ORDERING NUMBER	ITEM CODE	WT. LBS.
1	12" (300mm) SS Pole	LSP12-S/S	77079	13.3
	18" (450mm) SS Pole	LSP18-S/S	77080	15.5
	24" (600mm) SS Pole	LSP24-S/S	77081	17.7
	30" (750mm) SS Pole	LSP30-S/S	77082	19.9
	36" (900mm) SS Pole	LSP36-S/S	77083	22.1
	42" (1050mm) SS Pole	LSP42-S/S	77084	24.3
	48" (1200mm) SS Pole	LSP48-S/S	77085	26.5
	54" (1350mm) SS Pole	LSP54-S/S	77086	28.7
	60" (1500mm) SS Pole	LSP60-S/S	77087	31.0
2	SS Mounting Plate Kit (10–46"/250–1150mm)* (incl. (1) ea. tensioner mounting plate & pole mounting plate)	LSTMPK-S/S	78933	3.6
2a	SS Mounting Plate Kit (52"+/1300mm+)* (incl. (2) tensioner mounting plate)	LSTMPK2-S/S	78462	7.2
3	Tension Spring – Black (1 ea.)	CTS-B-S/S	78387	.2
3a	Tension Spring – White (1 ea.)	LS-SW-S/S	78850	.3
4	SS LS Blade Pin (1 ea.)	LS-BP-S/S	77115	.1
-	SS LST Spring Tensioner* – Black (incl. (1) ea. items 2 & 3)	LST-B-S/S	77124	7.5
-	SS LST Spring Tensioner* – White (incl. (1) ea. items 2 & 3a)	LST-W-S/S	77125	7.6
-	SS LST Spring Tensioner* – White (dual) (incl. (1) ea. item 2a & (2) ea. item 3a)	LST-W-S/S-2	77126	15.2

*Hardware Included

Lead time: 3 weeks

Replacement Blades

REF	BLADE WDITH in.	BLADE WDITH mm	ORDERING NUMBER	ITEM CODE	WT. LBS.
5	10	250	CRB-LS10W	77097	2.1
	16	400	CRB-LS16W	77098	3.3
	22	550	CRB-LS22W	77099	4.6
	28	700	CRB-LS28W	77100	5.8
	34	850	CRB-LS34W	77101	7.1
	40	1000	CRB-LS40W	77102	8.3
	46	1150	CRB-LS46W	77103	9.6
	52	1300	CRB-LS52W	77104	10.8
	58	1450	CRB-LS58W	77105	12.1

Lead time: 1 working day

All ingredients used in the polyurethane formulation of this blade comply with the relevant requirements of 21 CFR (FDA Code of Federal Regulations) for use in repeated bulk dry food applications.

Spring Tensioner Selection Chart

CLEANER BLADE WIDTH	77124 LST-B-S/S	77125 LST-W-S/S	77126 LST-W-S/S-2
Food Grade LS 10–28" (250–700mm)	X		
Food Grade LS 34–46" (850–1150mm)		X	
Food Grade LS 52–70" (1300–1750mm)			X

Section 10 – Other Flexco Conveyor Products

Flexco provides many conveyor products that help your conveyors to run more efficiently and safely. These components solve typical conveyor problems and improve productivity. Here is a quick overview on just a few of them:

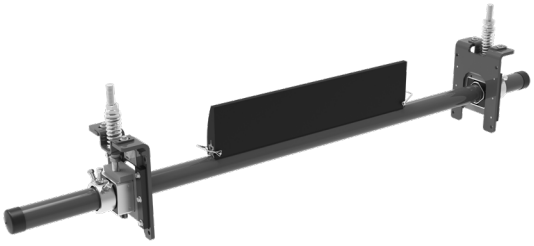
EZP1 Precleaner

- Patented ConShear™ blade renews its cleaning edge as it wears
- Visual Tension Check™ for optimal blade tensioning and simple retensioning
- Quick and easy one-pin blade replacement
- Material Path Option™ for optimal cleaning and reduced maintenance

DRX Impact Beds

- Exclusive Velocity Reduction Technology™ in order to better protect the belt
- Slide-Out Service™ gives direct access to all impact bars for change-out
- Impact bar supports for longer bar life
- 4 models to custom fit to the application

MDWS DryWipe Secondary Cleaner

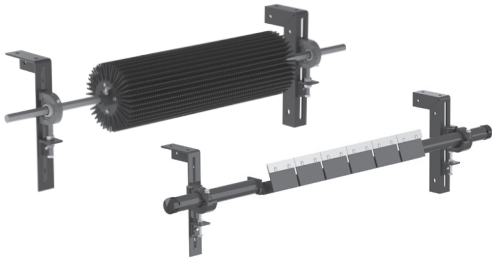


- Wipes the belt dry as final cleaner in system
- Automatic blade tensioning to the belt
- Easy, visual blade tension check
- Simple, one-pin blade replacement

PT Max™ Belt Trainer

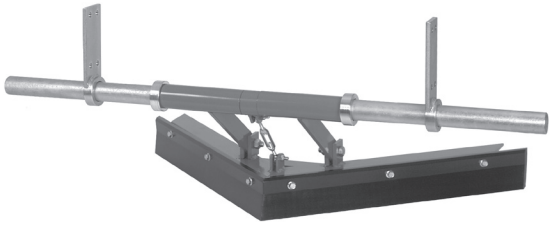
- Patented “pivot & tilt” design for superior training action
- Dual sensor rollers on each side to minimize belt damage
- Pivot point guaranteed not to freeze up
- Available for topside and return side belts

Flexco Specialty Belt Cleaners



- “Limited space” cleaners for tight conveyor applications
- High Temp cleaners for severe, high heat applications
- A rubber fingered cleaner for chevron and raised rib belts
- Multiple cleaner styles in stainless steel for corrosive applications

Belt Plows



- A belt cleaner for the tail pulley
- Exclusive blade design quickly spirals debris off the belt
- Economical and easy to service
- Available in vee or diagonal models

Visit **www.flexco.com** for other Flexco locations and products, or to find an authorized distributor.