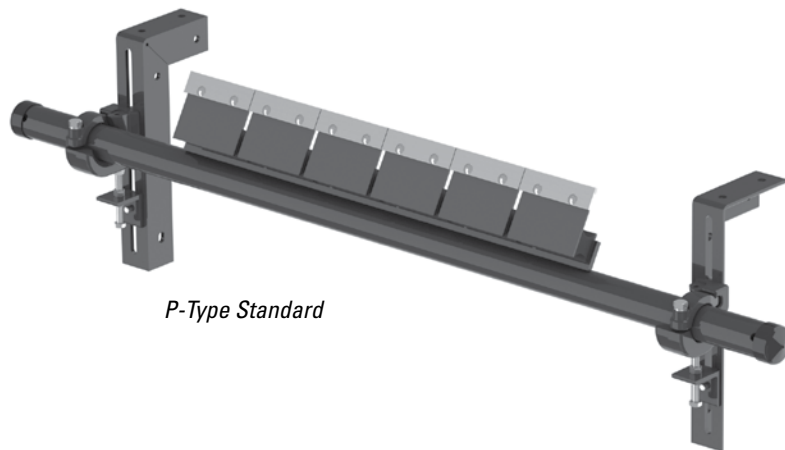


# P-Type<sup>®</sup> Secondary Belt Cleaner

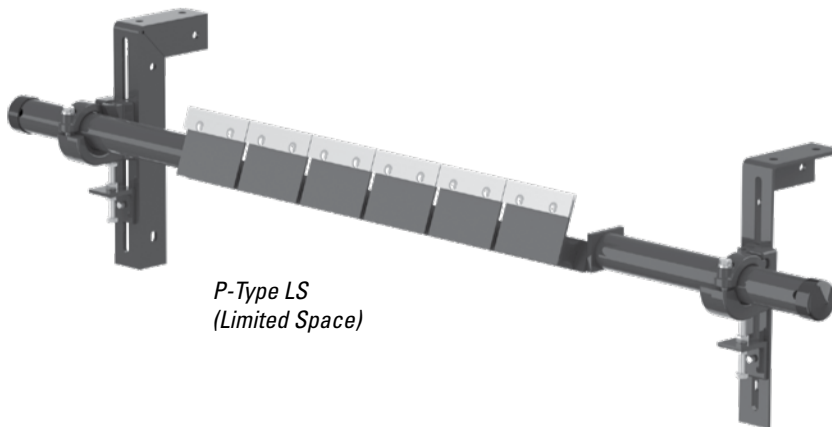
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## Installation, Operation and Maintenance Manual

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*P-Type Standard*



*P-Type LS  
(Limited Space)*

# P-Type® Secondary Belt Cleaner

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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

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|   |           |
|---|-----------|
| <b>Section 1 – Important Information .....</b>  | <b>2</b>  |
| 1.1 General Introduction .....  | 2         |
| 1.2 User Benefits .....   | 2         |
| 1.3 Service Option .....  | 2         |
| <b>Section 2 – Safety Considerations and Precautions .....</b>                        | <b>3</b>  |
| 2.1 Stationary Conveyors .....  | 3         |
| 2.2 Operating Conveyors .....   | 3         |
| <b>Section 3 – Pre-Installation Checks and Options.....</b>                           | <b>4</b>  |
| 3.1 Checklist .....   | 4         |
| 3.2 Optional Installation Accessories.....  | 4         |
| <b>Section 4 – P-Type® and P-Type LS Belt Cleaner Installation Instructions .....</b> | <b>5</b>  |
| <b>Section 5 – Pre-Operation Checklist and Testing.....</b>                           | <b>9</b>  |
| 5.1 Pre-Op Checklist .....  | 9         |
| 5.2 Test Run the Conveyor .....   | 9         |
| <b>Section 6 – Maintenance .....</b>  | <b>10</b> |
| 6.1 New Installation Inspection .....   | 10        |
| 6.2 Routine Visual Inspection .....   | 10        |
| 6.3 Routine Physical Inspection.....  | 10        |
| 6.4 Blade Replacement Instructions.....   | 11        |
| 6.5 Maintenance Log .....   | 13        |
| 6.6 Cleaner Maintenance Checklist.....  | 14        |
| <b>Section 7 – Troubleshooting .....</b>  | <b>15</b> |
| <b>Section 8 – Specs and CAD Drawings.....</b>  | <b>16</b> |
| 8.1 Specs and Guidelines .....  | 16        |
| 8.2 CAD Drawing - P-Type with C-Tips .....  | 17        |
| 8.3 CAD Drawing - P-Type with V-Tips .....  | 18        |
| 8.4 CAD Drawing- P-Type LS with C-Tips.....   | 19        |
| <b>Section 9 – Replacement Parts .....</b>  | <b>20</b> |
| <b>Section 10 – Other Flexco Conveyor Products .....</b>                              | <b>21</b> |

# Section 1 – Important Information

---

## 1.1 General Introduction

We at Flexco are very pleased that you have selected a P-Type® Secondary Belt Cleaner 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 visit our web site or contact our Customer Service Department:

**Customer Service: +49-7428-9406-0**

**Visit [www.flexco.com](http://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 P-Type® Secondary Belt Cleaner 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 P-Type® Secondary Belt Cleaner, 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.

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### 2.1 Stationary Conveyors

The following activities are performed on stationary conveyors:

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

#### **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. Unforeseeable 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

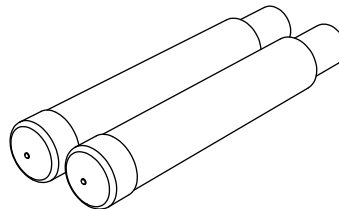
### 3.2 Optional Installation Accessories

Pole extenders are available for wide, non-standard conveyor structures.

**76024**

#### **Pole Extender Kit**

- Provides 750mm (30") of extended pole length
- Includes 2 pole extenders



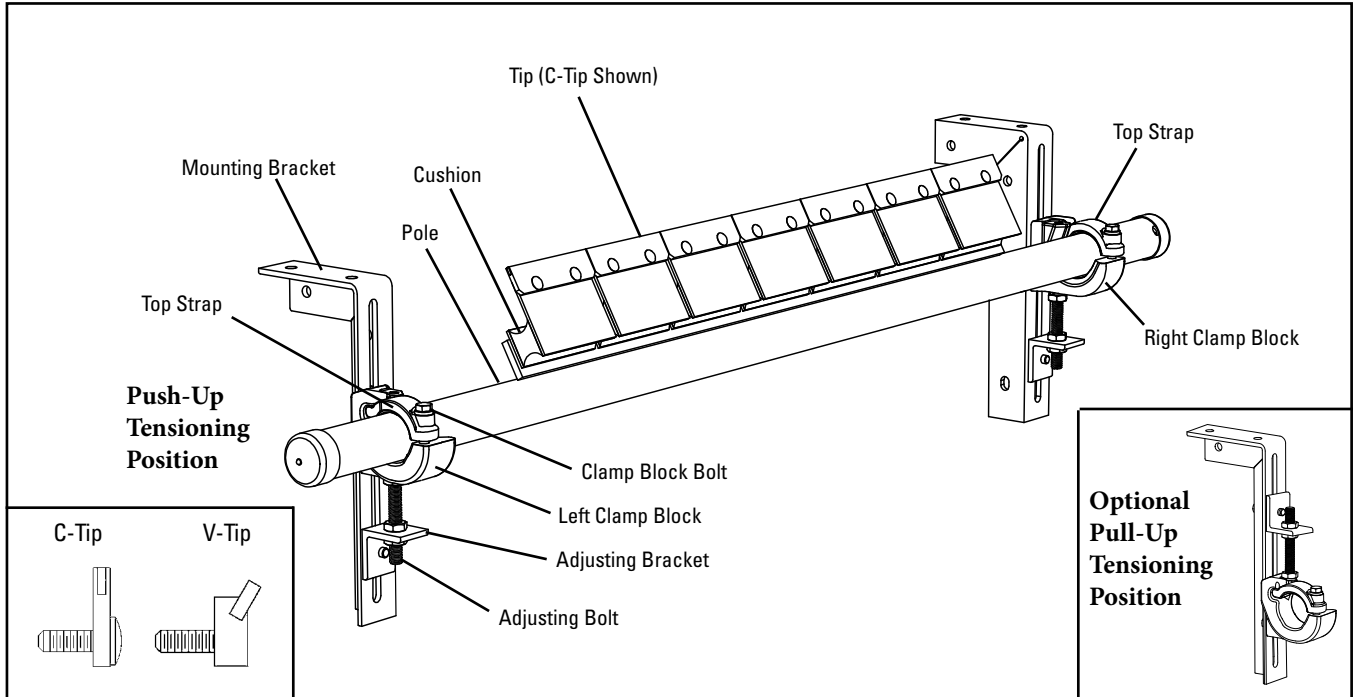
#### **Optional Mounting Accessories**

| <b>Description</b> | <b>Ordering Number</b> | <b>Item Code</b> | <b>Wt. Kg.</b> |
|--------------------|------------------------|------------------|----------------|
| Pole Extender Kit  | MAPEK                  | 76024            | 9.9            |

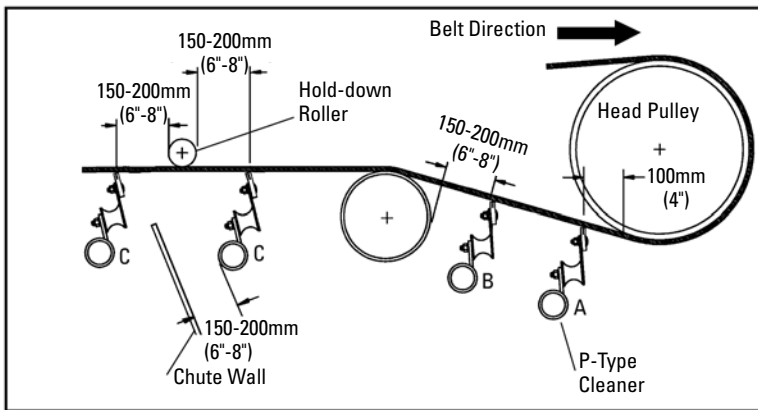
Lead time: 1 working day

# Section 4 – Installation Instructions

## P-Type Secondary Belt Cleaner



**Physically lock out and tag the conveyor at the power source before you begin cleaner installation.**



### Tools Needed

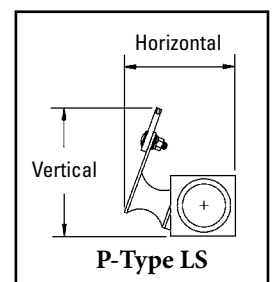
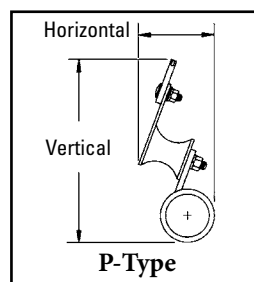
- Tape Measure
- 19mm (3/4") Wrench
- Ratchet With 19mm (3/4") Socket
- (2) 152mm (6") C-Clamps (for Temporary Positioning of Mounting Brackets)
- Cutting Torch and/or Welder
- Marking Pen

### Before You Begin:

- Double check the tip style needed for your application:  
 C-Tip - for mechanically spliced and vulcanized belts.  
 V-Tip - for vulcanized belts only.
- For chute mounting it may be necessary to cut an access hole to allow for installation and inspections. (See dimensions in STEP 2.)
- Follow all safety precautions when using a cutting torch.
- If welding, protect all fastener threads from weld spatter.
- For cleaner clearance requirements see chart. P-Type LS (available with C-Tip only) is designed for tighter space configurations.

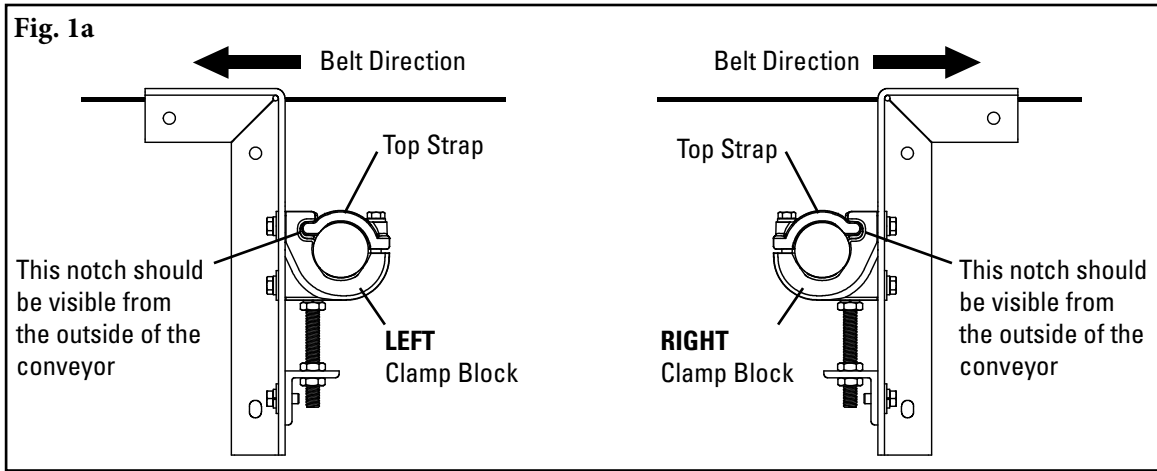
### Clearance Requirements for Installation

|                   | Vertical       | Horizontal |
|-------------------|----------------|------------|
| P-Type Cleaner    | 175mm (7")     | 100mm (4") |
| P-Type LS Cleaner | 138mm (5-1/2") | 125mm (5") |



# Section 4 – Installation Instructions (cont.)

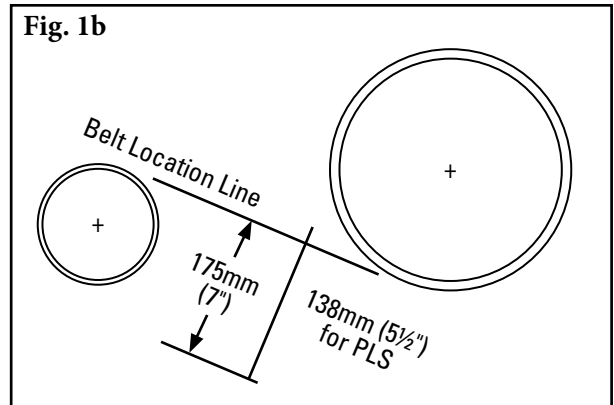
## P-Type Secondary Belt Cleaner



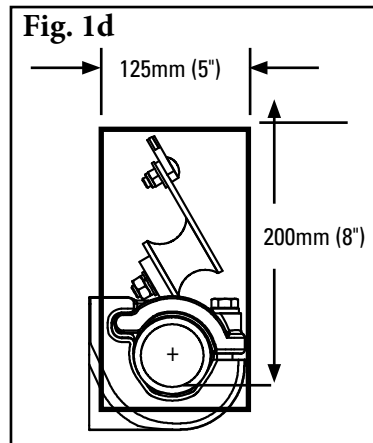
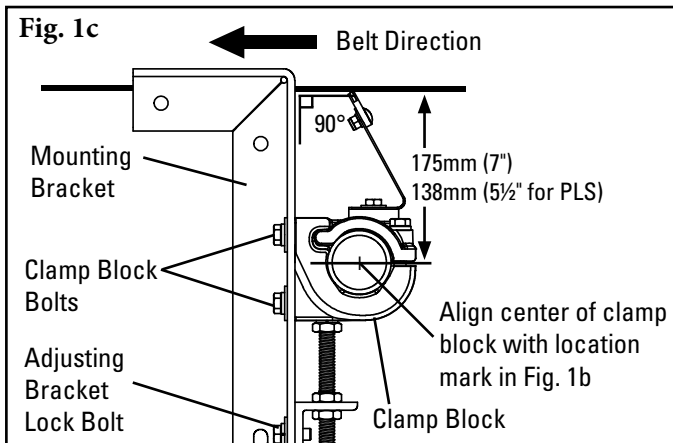
### 1. Install mounting brackets.

Determine the correct clamp block (left or right) and bracket needed for each side of the conveyor (Fig. 1a). The top strap should be offset away from the belt (you should be able to see the notch for the top strap from the outside of the conveyor).

**For chute mounting:** For a chute installation a belt location line must first be established. Draw a line on the chute replicating this location. If head pulley and snub pulley are close, it may be necessary to assume an approximate belt line between the two. In the determined location draw a line perpendicular to the belt line. Make a mark on this line 175mm (7") 138mm (5-½" for PLS) below belt location line (Fig. 1b).



Locate a mounting bracket along the belt location line (Fig. 1b), allowing the centerline of the clamp block to align with the 175mm (7") 138mm (5-½" for PLS) mark (Fig. 1c). To move the clamp blocks, if necessary, loosen the clamp block lock bolts and the adjusting bracket lock bolt and move the clamp block to a position where the center of the hole is 175mm (7") 138mm (5-½" for PLS) below the bottom of the belt. Bolt or weld in place. Repeat this step on the opposite side. On one side an access hole may be required (Fig. 1d). **NOTE:** The mounting brackets must be aligned perpendicular to the belt.

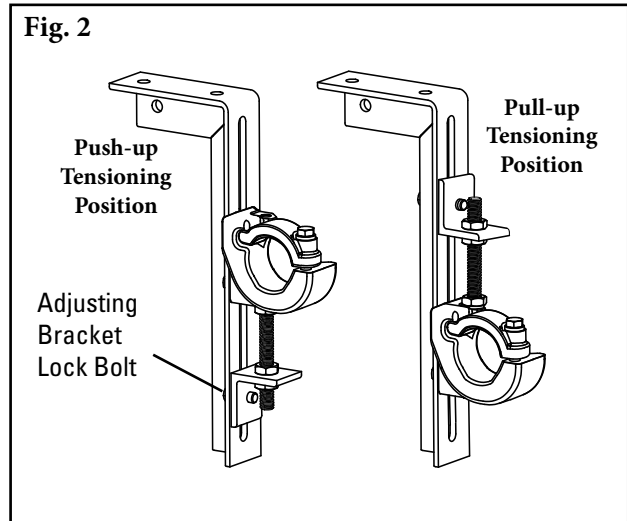
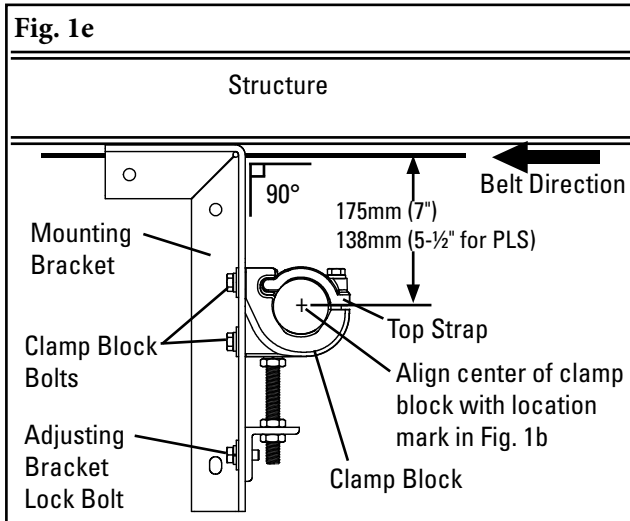




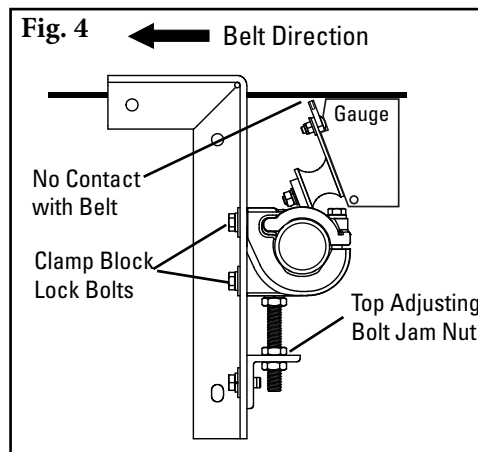
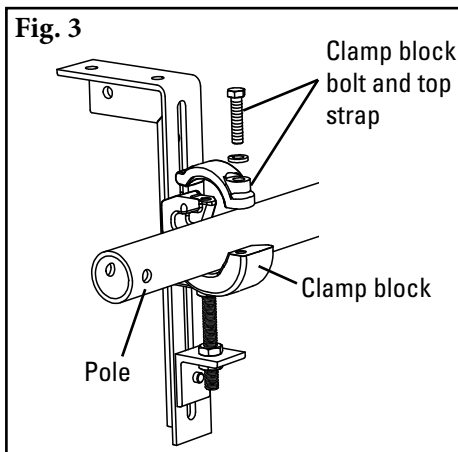
## Section 4 – Installation Instructions (cont.)

### P-Type Secondary Belt Cleaner

**For structure mounting:** In most applications the standard mounting brackets will have adequate room to fit on the structure with no cutting. Clamp the mounting bracket into position (use 6" clamps). Move the clamp block to align the center of the block with a point 175mm (7") 138mm (5-½" for PLS) below the belt (Fig. 1e). To move the clamp blocks, if necessary, loosen the clamp block lock bolts and the adjusting bracket lock bolt and turn the adjusting bolt jam nuts. The bracket can now be bolted or welded in place. Locate and install bracket on the opposite side of belt in alignment with the first bracket. **NOTE:** The brackets must be aligned perpendicular to the belt.

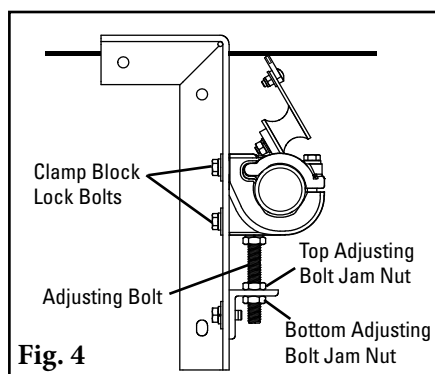


- 2. Choose the tensioner position.** The tensioner is shipped mounted in the push-up position. Depending upon the space constraints of the installation, the tensioner can be optionally mounted in a pull-up position. To do this, loosen the threaded rod lock nut, unscrew the threaded rod and remove adjusting bracket lock bolt. Then move the adjusting bracket and threaded rod to the top of the clamp blocks (Fig. 2) and tighten threaded rod lock nut.
- 3. Install the pole.** Remove the clamp block top strap on the access side of the conveyor, and on the opposite side loosen the clamp block bolt. Slide the pole across and into the loosened clamp block, place near end of pole in bottom section of clamp block (Fig. 3). Replace the top strap on the clamp block, center the blades on the belt and tighten both clamp block bolts finger tight.
- 4. Set the tip angle.** With angle gauge provided, rotate the tips to the preset angle (Fig. 3) and lock the pole in place by tightening the clamp block bolts equally. **NOTE:** Make sure there is NO tip-to-belt contact while making this alignment. If contact occurs, lower the pole by loosening the clamp block lock bolts and raising the top adjusting bolt jam nut (Fig. 4). When the tips are not touching the belt, repeat this step.

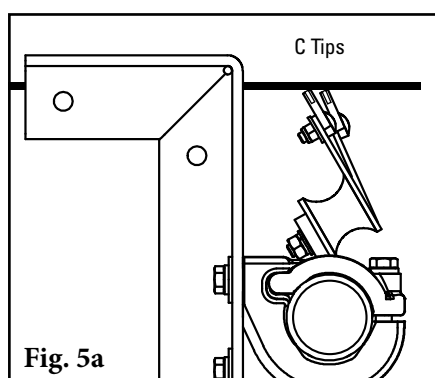


## Section 4 – Installation Instructions (cont.)

### P-Type Secondary Belt Cleaner

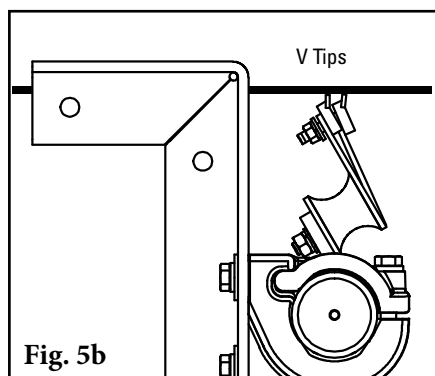


5. **Set the tip tension.** With all clamp block lock bolts slightly loosened, back down the bottom adjusting bolt jam nut 4-5 turns on both sides (Fig. 4). Turn the top adjusting bolt jam nuts down until light contact is made between the tips and belt across the entire width of the cleaner. Give an additional 1 turn to both top adjusting bolt jam nuts and tighten both bottom adjusting bolt jam nuts. Tighten all clamp block lock bolts. Double check that all bolts and nuts on the cleaner are tight.



6. **Check the tip tension.** Pull back on the outside tip until the tip-to-belt contact is broken and release. If the cleaner is correctly tensioned the complete blade of the adjacent tip will be visible (Fig. 5a & 5b). If not, add (or reduce) tension by making 1/4 turn adjustments on the adjusting bolt as described in STEP 4 until the adjacent tip is visible.

**Test run the cleaner and inspect its performance.** If vibration occurs or more cleaning efficiency is desired, increase the tip tension by making a 1/4 turn adjustment on each adjusting bolt.



## 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 adjusting brackets and tips for 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 P-Type® Secondary Belt Cleaner 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 adjusting brackets are set 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.
- Significant signs of carryback

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

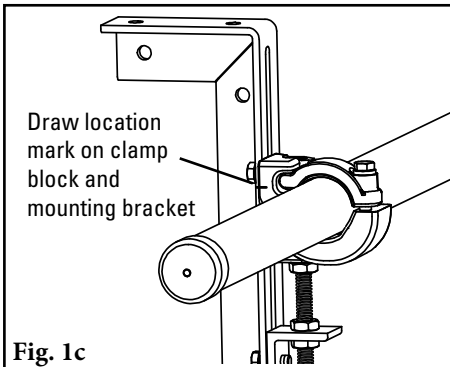
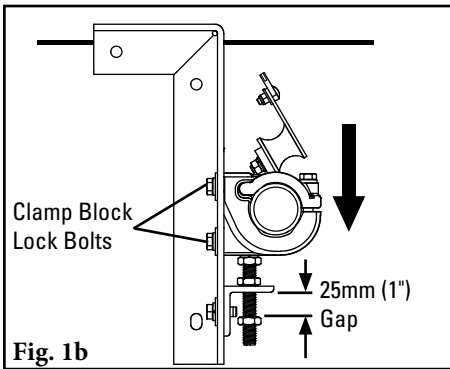
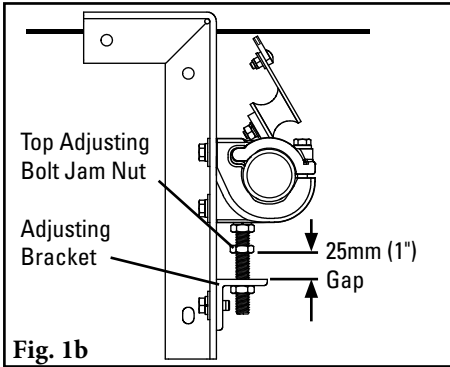
### 6.3 Routine Physical Inspection (every 6-8 weeks)

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.
- 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 steps on page 8.
- When maintenance tasks are completed, test run the conveyor to ensure the cleaner is performing properly.

## Section 6 – Maintenance (cont.)

### 6.4 Blade Replacement Instructions (C-Tips or V-Tips)

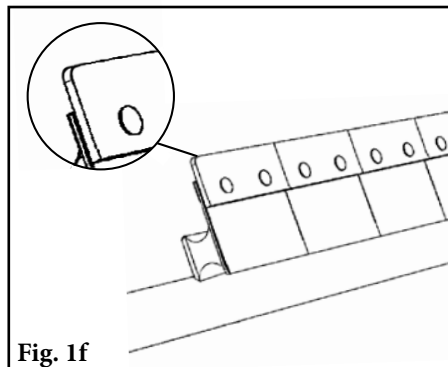
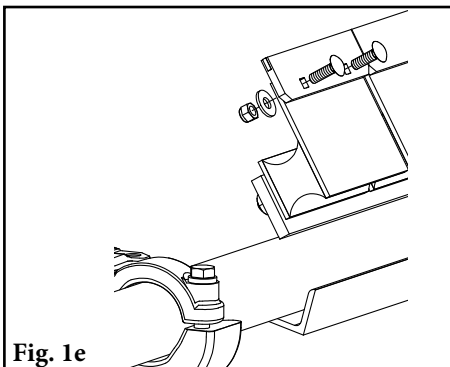
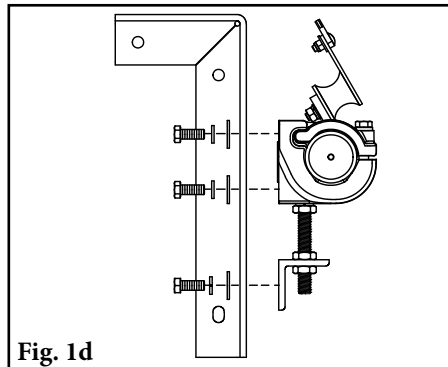


#### BEFORE YOU BEGIN:

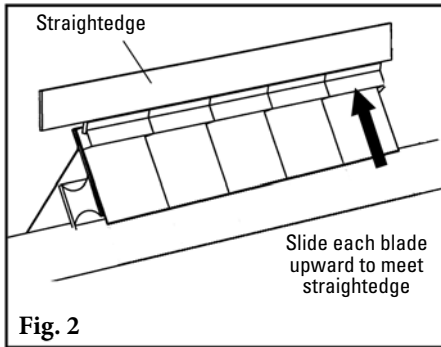
**Physically Lock Out And Tag The Conveyor At The Power Source.**

#### 1. Release the blade tension and remove worn blade tips.

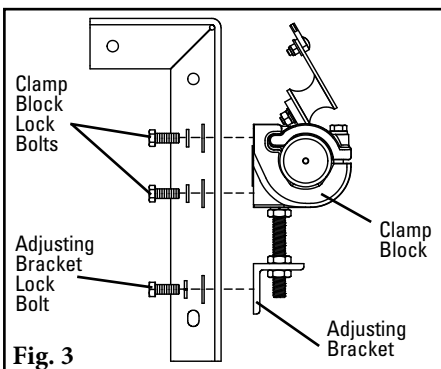
- Loosen the top adjusting bolt jam nuts 1" (25mm) on the top of the adjusting brackets (Fig. 1a).
- Loosen the clamp block lock bolts on both sides and allow the pole to move down and rest on the raised top adjusting bolt jam nuts (Fig. 1b).
- Place location marks across the mounting bracket and the clamp block for quick positioning after blade replacement (Fig. 1c).
- Remove the clamp block lock bolts and adjusting bracket lock bolts on each side and remove the pole with the clamp blocks and adjusting brackets attached (Fig. 1d).
- Remove the nuts, flat washers and lock washers from the tips and remove worn tips (Fig. 1e).
- Insert new blade tips and install flat washers, lock washers and nuts finger tight. Buff the outside corners of the last tip on each side of the cleaner (Fig. 1f).



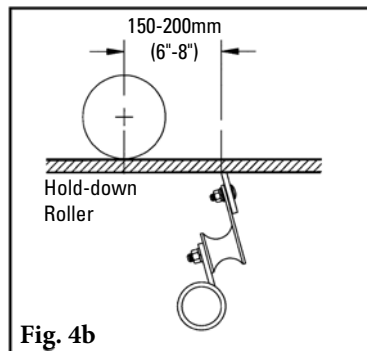
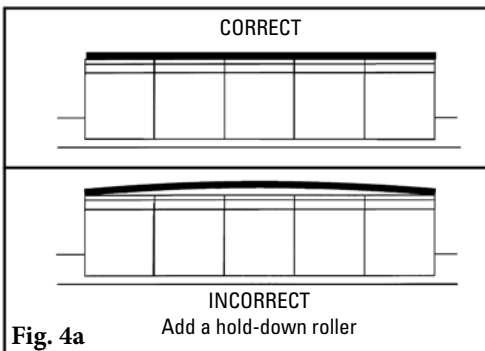
## Section 6 – Maintenance (cont.)



2. **Align the blade tips.** Push tips together so there is no more than a .254 to .381 mm (.010" to .015" gap between them. Position a straightedge along the top surface of new blade tips. Pull upward on each blade to align with the bottom of the straightedge and tighten the nuts (Fig. 2).

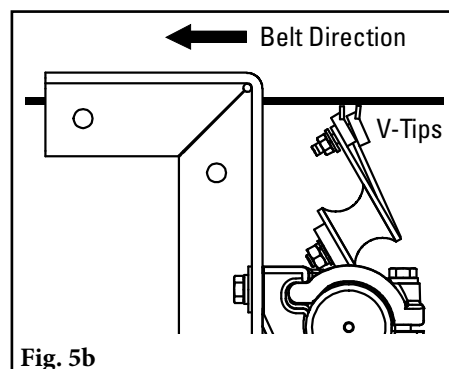
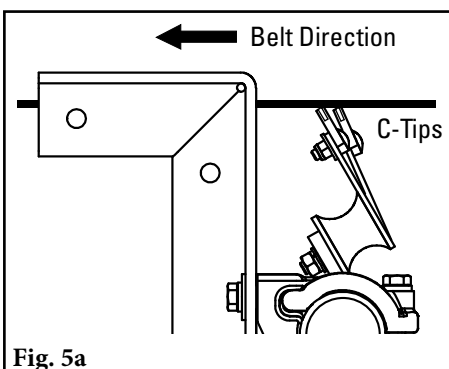


3. **Reinstall the pole.** Slide the pole back into position on the mounting brackets, aligning marks made on the bracket and the clamp block. Install the two adjusting bracket lock bolts and tighten. Install the four clamp block lock bolts finger tight (Fig. 3).



4. **Set the blade tension.** Turn the top adjusting bolt jam nuts down until light tip to belt contact is made across the entire width of the cleaner. Add an additional 1 turn on the top adjusting bolt jam nuts and lock the bottom adjusting bolt jam nuts. Tighten all clamp block lock bolts. **NOTE:** If the belt is cupped, do not overtension the blades to contact the belt. A hold-down roller should be installed to flatten the belt (Fig. 4a and 4b). (Try the Stabilizing Return Roller or Stabilizing Roller Bracket Kit.)

5. **Check the blade tip tension.** Pull back on the outer blade in the direction of belt travel until the blade breaks contact with the belt. Let go of the blade. With correct tension the full thickness of the adjacent blade tip should be visible in front of the outer blade (Fig. 5a and 5b). Also check the center blade in same manner. Add tension in 1/4-turn increments on the top adjusting bolt jam nuts until view of full thickness of the adjacent blade tip is achieved.



6. **Test run cleaner and inspect operation.** If vibration occurs, increase tip tension by making 1/4-turn adjustments.

## Section 6 – Maintenance (cont.)

---

### 6.5 Maintenance Log

Conveyor Name/No. \_\_\_\_\_

Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote #: \_\_\_\_\_

Activity: \_\_\_\_\_

---

Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote #: \_\_\_\_\_

Activity: \_\_\_\_\_

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Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote #: \_\_\_\_\_

Activity: \_\_\_\_\_

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Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote #: \_\_\_\_\_

Activity: \_\_\_\_\_

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Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote #: \_\_\_\_\_

Activity: \_\_\_\_\_

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Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote #: \_\_\_\_\_

Activity: \_\_\_\_\_

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Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote #: \_\_\_\_\_

Activity: \_\_\_\_\_

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Date: \_\_\_\_\_ Work done by: \_\_\_\_\_ Service Quote #: \_\_\_\_\_

Activity: \_\_\_\_\_

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## Section 6 – Maintenance (cont.)

### 6.6 Cleaner Maintenance Checklist

Site: \_\_\_\_\_ Inspected by: \_\_\_\_\_ Date: \_\_\_\_\_

Belt Cleaner: \_\_\_\_\_ Serial Number: \_\_\_\_\_

#### 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")  1800mm (72")

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

Blade wear: 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   |
|--------------------------------------|-----------------------------------|--|
| Vibration                            | Cleaner secure bolts not set      | Ensure all locking nuts are tight (Loctite)  |
|                                      | Cleaner not set up correctly      | Ensure cleaner set up properly (check tip angle with gauge)  |
|                                      | Belt tension too high             | Ensure cleaner can conform to belt, or replace with alternate Flexco secondary cleaner                             |
|                                      | Belt flap                         | Introduce hold-down roller to flatten belt   |
|                                      | Cleaner over-tensioned            | Ensure cleaner is correctly tensioned  |
|                                      | Cleaner under-tensioned           | Ensure cleaner is correctly tensioned  |
| Material buildup on cleaner          | Cleaner not set up correctly      | Ensure cleaner set up properly (check tip angle with gauge)  |
|                                      | Buildup on chute                  | Ensure cleaner is not located too close to back of chute, allowing buildup   |
|                                      | Cleaner being overburdened        | Introduce Flexco precleaner  |
|                                      | Excessive sticky material         | Frequently clean unit of buildup   |
| Damaged belt cover                   | Cleaner over-tensioned            | Ensure cleaner is correctly tensioned  |
|                                      | Cleaner blade damage              | Check blade for wear, damage and chips, replace where necessary  |
|                                      | Attack angle not correct          | Ensure cleaner set up properly (check tip angle with gauge)  |
|                                      | Material buildup in chute         | Frequently clean unit of buildup   |
| Cleaner not conforming to belt       | Cleaner not set up correctly      | Ensure cleaner set up properly (check tip angle with gauge)  |
|                                      | Belt tension too high             | Ensure cleaner can conform to belt, introduce hold-down roller, or replace with alternate Flexco secondary cleaner |
|                                      | Belt flap                         | Introduce hold-down roller to flatten belt   |
|                                      | Cleaner cannot conform            | Ensure cleaner can conform to belt, introduce hold-down roller, or replace with alternate Flexco secondary cleaner |
| Material passing cleaner             | Cleaner not set up correctly      | Ensure cleaner set up properly (check tip angle with gauge)  |
|                                      | Cleaner tension too low           | Ensure cleaner is correctly tensioned  |
|                                      | Cleaner blade worn/damaged        | Check blade for wear, damage and chips, replace where necessary  |
|                                      | Cleaner being overburdened        | Introduce Flexco precleaner  |
|                                      | Belt flap                         | Introduce hold-down roller to flatten belt   |
|                                      | Belt worn or grooved              | Introduce water spray pole   |
|                                      | Cleaner cannot conform            | Ensure cleaner can conform to belt, introduce hold-down roller, or replace with alternate Flexco secondary cleaner |
| Damage to mechanical fastener        | Incorrect cleaner blade selection | Change blade type to accommodate fastener style (C-Tip or V-Tip)   |
|                                      | Belt not skived correctly         | Spot and redo splice correctly, lowering the profile flush or below belt surface                                   |
|                                      | Blade angle incorrect             | Reset with gauge   |
| Missing material in belt center only | Cupped Belt                       | Install hold-down roller and reset blade angle with gauge  |
|                                      | Cleaner blade worn/damaged        | Check blade for wear, damage and chips, replace where necessary  |
| Missing material on outer edges only | Cupped Belt                       | Install hold-down roller and reset blade angle with gauge  |
|                                      | Cleaner blade worn/damaged        | Check blade for wear, damage and chips, replace where necessary  |

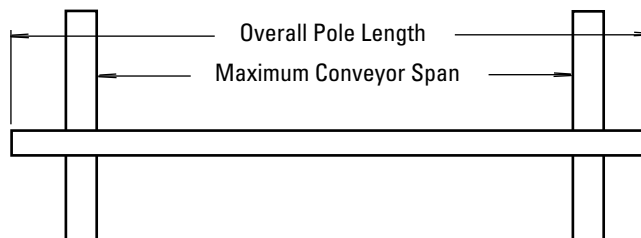
# Section 8 – Specifications and CAD Drawings

## 8.1 Specifications and Guidelines

### Pole Length Specifications

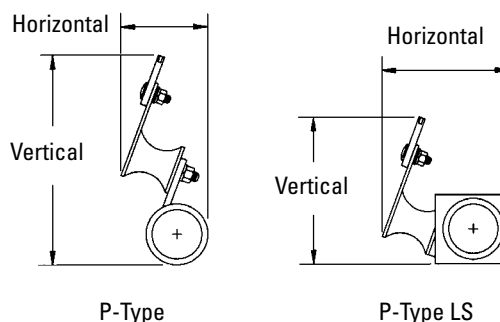
| CLEANER SIZE |     | POLE LENGTH |     | MAXIMUM CONVEYOR SPAN |     |
|--------------|-----|-------------|-----|-----------------------|-----|
| mm           | in. | mm          | in. | mm                    | in. |
| 450          | 18  | 1200        | 48  | 1075                  | 43  |
| 600          | 24  | 1350        | 54  | 1225                  | 49  |
| 750          | 30  | 1500        | 60  | 1375                  | 55  |
| 900          | 36  | 1650        | 66  | 1525                  | 61  |
| 1050         | 42  | 1800        | 72  | 1675                  | 67  |
| 1200         | 48  | 1950        | 78  | 1825                  | 73  |
| 1350         | 54  | 2200        | 88  | 2075                  | 83  |
| 1500         | 60  | 2350        | 94  | 2225                  | 89  |
| 1800         | 72  | 2650        | 106 | 2525                  | 101 |

Pole Diameter - 60mm (2-3/8")



### Clearance Guidelines for Installation

| Cleaner Type | Belt Width/<br>Cleaner Size |         | Horizontal<br>Clearance<br>Required |     | Vertical<br>Clearance<br>Required |       |
|--------------|-----------------------------|---------|-------------------------------------|-----|-----------------------------------|-------|
|              | mm                          | in.     | mm                                  | in. | mm                                | in.   |
| P-Type       | 450 - 1800                  | 18 - 72 | 100                                 | 4   | 200                               | 8     |
| P-Type LS    | 450 - 1350                  | 18 - 54 | 125                                 | 5   | 138                               | 5 1/2 |



### P-Type Cushion Specifications

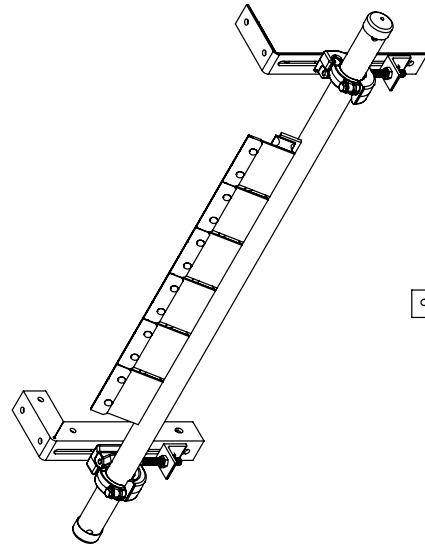
| Cushion  | Durometer | Temperature Range               |
|----------|-----------|---------------------------------|
| Standard | 55A       | -35° to 82° C<br>-30° to 180° F |
| Neoprene | 55A       | -20° to 110° C<br>-4° to 230° F |

### Specifications:

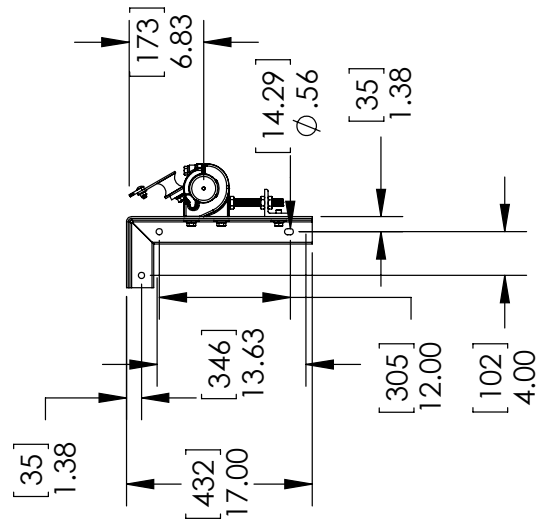
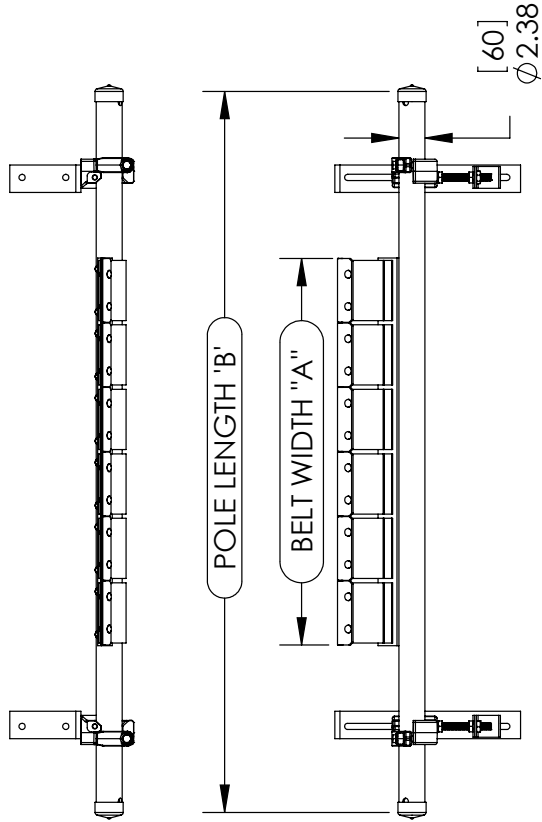
- Maximum Belt Speed.....5M/sec (1000 FPM)
- Temperature Rating.....-35°C to 82°C (-30°F to 180°F)
- Usable Blade Wear Length.....9mm (3/8")
- Blade Materials .....C-Tip: Impact Resistant Tungsten Carbide (works with mechanical fasteners)  
V-Tip: Long Life Tungsten Carbide (works on vulcanized belts only)
- Available for Belt Widths.....P-Type: 450 to 1800mm (18" to 72")  
P-Type LS: 450 to 1350mm (18" to 54")  
Other sizes available upon request.
- CEMA Cleaner Rating.....Class 4

# Section 8 – Specifications and CAD Drawings (cont.)

## 8.2 CAD Drawing – P-Type with C-Tips



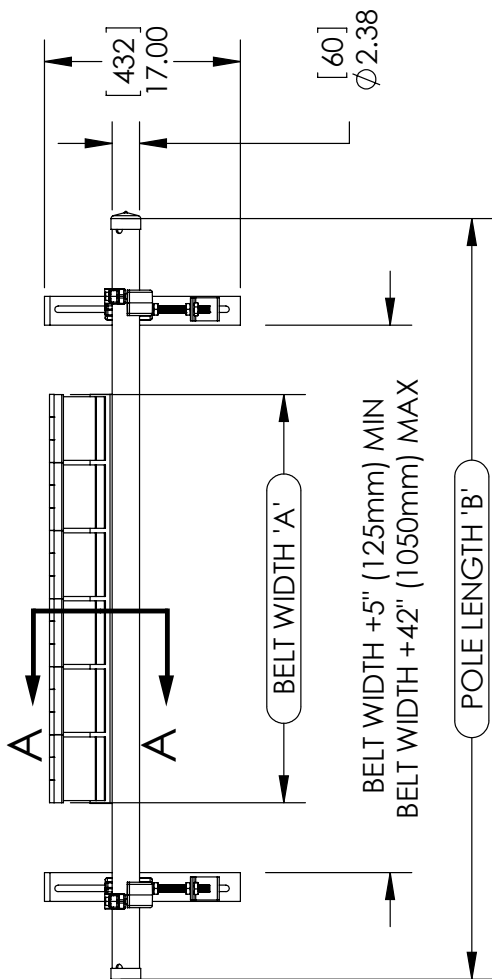
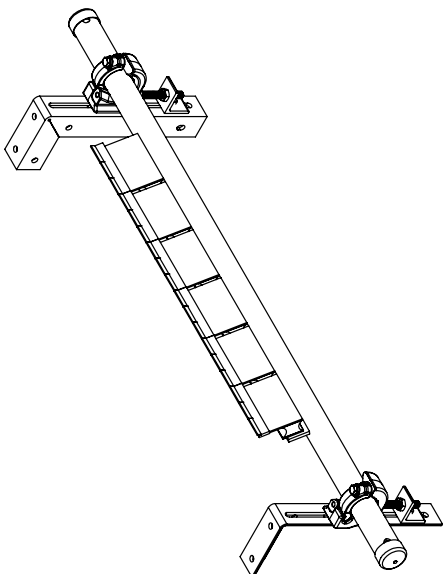
| SPECIFICATIONS         |                        |                         | P-TYPE CLEANER |                 |           |
|------------------------|------------------------|-------------------------|----------------|-----------------|-----------|
| BELT WIDTH 'A'<br>(in) | BELT WIDTH 'A'<br>(mm) | POLE LENGTH 'B'<br>(in) | # OF<br>BLADES | ORDER<br>NUMBER | ITEM CODE |
| 18                     | 450                    | 48                      | 3              | PC18            | 74566     |
| 24                     | 600                    | 54                      | 4              | PC24            | 74567     |
| 30                     | 750                    | 60                      | 5              | PC30            | 74568     |
| 36                     | 900                    | 66                      | 6              | PC36            | 74569     |
| 42                     | 1050                   | 72                      | 7              | PC42            | 74570     |
| 48                     | 1200                   | 78                      | 8              | PC48            | 74571     |
| 54                     | 1350                   | 88                      | 9              | PC54            | 74572     |
| 60                     | 1500                   | 94                      | 10             | PC60            | 74573     |
| 72                     | 1800                   | 106                     | 12             | PC72            | 74574     |



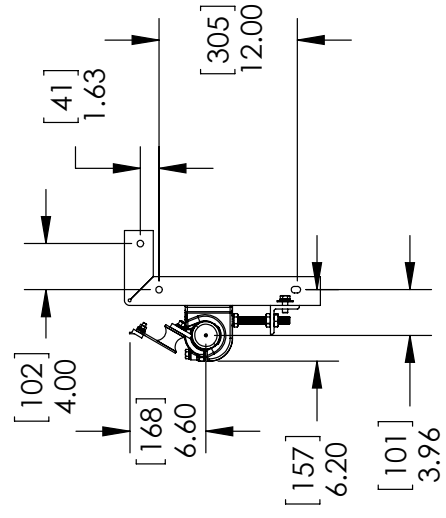
# Section 8 – Specifications and CAD Drawings (cont.)

## 8.3 CAD Drawing – P-Type with V-Tips

| SPECIFICATIONS         |                         | P-TYPE SECONDARY V-TIPS |              |           |
|------------------------|-------------------------|-------------------------|--------------|-----------|
| BELT WIDTH 'A'<br>(in) | POLE LENGTH 'B'<br>(in) | NUMBER OF TIPS          | ORDER NUMBER | ITEM CODE |
| 18                     | 450                     | 48                      | PV-18        | 78453     |
| 24                     | 600                     | 54                      | PV-24        | 78415     |
| 30                     | 750                     | 60                      | PV-30        | 78417     |
| 36                     | 900                     | 66                      | PV-36        | 78419     |
| 42                     | 1050                    | 72                      | PV-42        | 78421     |
| 48                     | 1200                    | 78                      | PV-48        | 78423     |
| 54                     | 1350                    | 88                      | PV-54        | 78454     |
| 60                     | 1500                    | 94                      | PV-60        | 78455     |
| 72                     | 1800                    | 106                     | PV72         | 73438     |

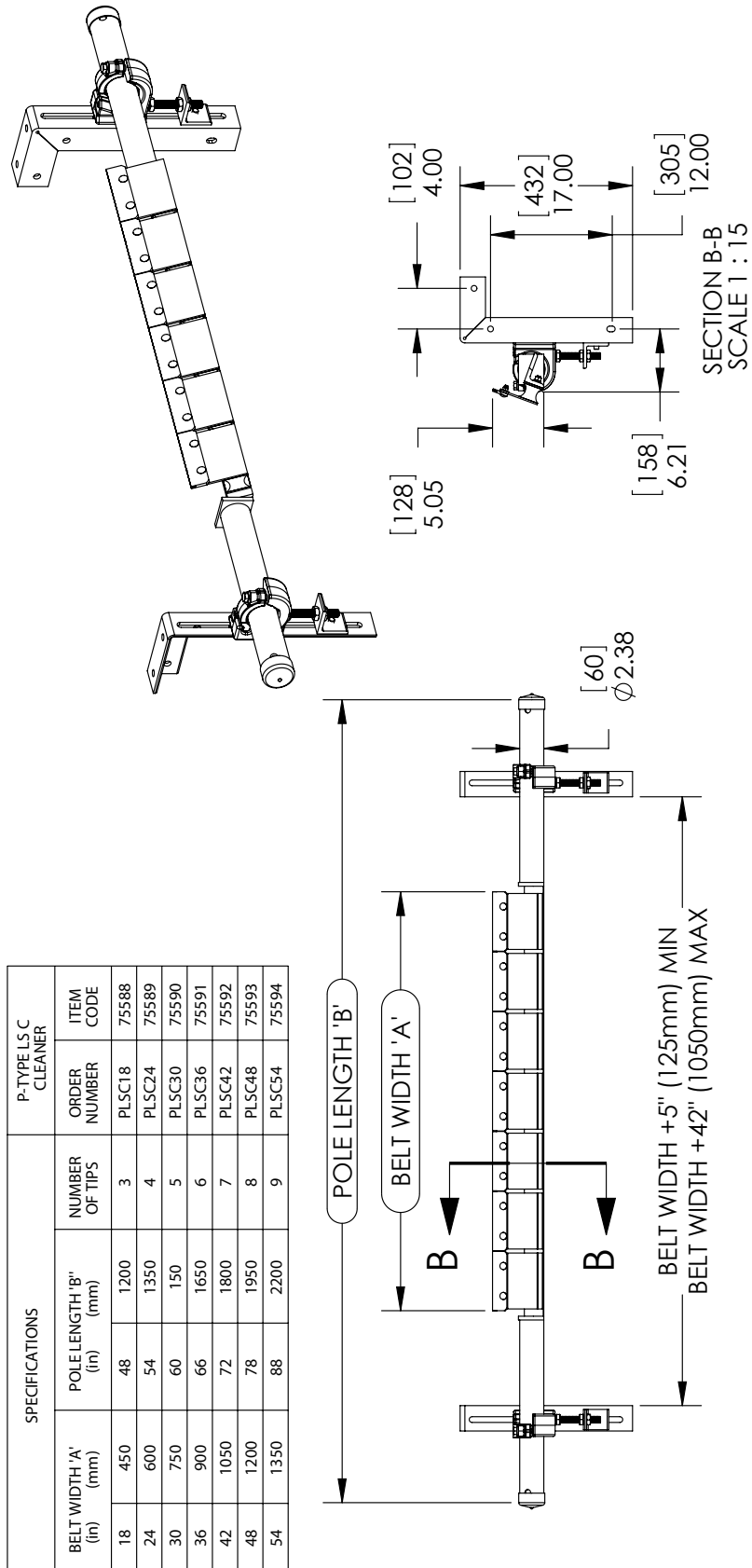


SECTION A-A



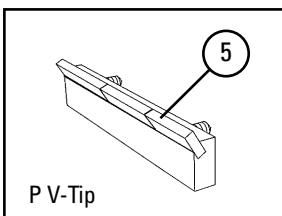
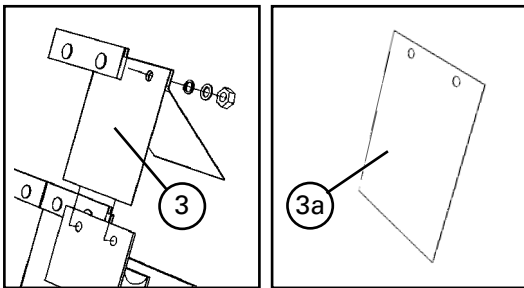
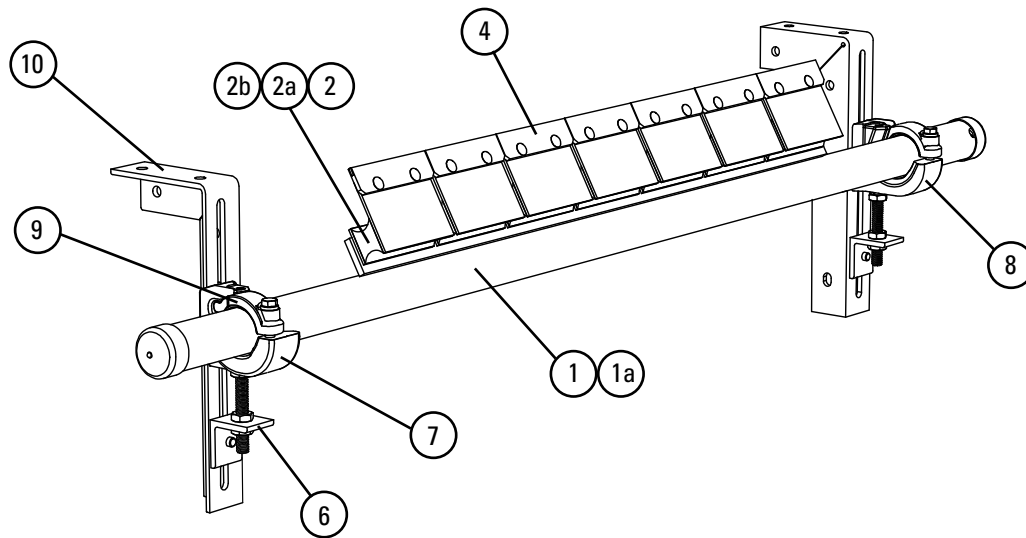
# Section 8 – Specifications and CAD Drawings (cont.)

## 8.4 CAD Drawing – P-Type LS with C-Tips



# Section 9 – Replacement Parts List

## 9.1 Replacement Parts List- P-Type Secondary Belt Cleaner



### Replacement Parts

| REF | DESCRIPTION  | ORDERING NUMBER | ITEM CODE | WT. KG. |
|-----|--|-----------------|-----------|---------|
| 1   | 450mm (18") Pole   | PP-18           | 78414     | 10.2    |
|     | 600mm (24") Pole   | PP-24           | 78416     | 11.8    |
|     | 750mm (30") Pole   | PP-30           | 78418     | 14.7    |
|     | 900mm (36") Pole   | PP-36           | 78420     | 15.0    |
|     | 1050mm (42") Pole  | PP-42           | 78422     | 19.5    |
|     | 1200mm (48") Pole  | PP-48           | 78424     | 21.5    |
|     | 1350mm (54") Pole  | PP-54           | 78425     | 25.0    |
|     | 1500mm (60") Pole  | PP-60           | 78451     | 26.0    |
|     | 1800mm (72") Pole  | PP72            | 73017     | 29.0    |
| 1a  | 450mm (18") LS Pole  | PLSP18          | 75595     | 14.7    |
|     | 600mm (24") LS Pole  | PLSP24          | 75596     | 16.3    |
|     | 750mm (30") LS Pole  | PLSP30          | 75597     | 17.6    |
|     | 900mm (36") LS Pole  | PLSP36          | 75598     | 19.2    |
|     | 1050mm (42") LS Pole   | PLSP42          | 75599     | 21.0    |
|     | 1200mm (48") LS Pole   | PLSP48          | 75600     | 22.6    |
|     | 1350mm (54") LS Pole   | PLSP54          | 75601     | 24.3    |
| 2   | P2 C-Tip Cushion*  | PHA             | 73626     | 0.9     |
| 2a  | P Cushion SS Neoprene* (oil resistant)   | PSSC            | 77045     | 1.6     |
| 2b  | P Cushion Neoprene* (oil resistant)  | PNC             | 74984     | 1.6     |
| 3   | P Polyshield   | PPS6            | 78450     | 0.2     |
| 3a  | P SS Shield  | PSSS            | 78434     | 0.2     |
| 4   | C-Tip* Kit (1 ea.)   | ICT6            | 74535     | 0.3     |
| 5   | P V-Tip* (for vulcanized belts only)   | PSA150          | 73156     | 0.5     |
| 6   | Adjusting Bracket Kit* (1 ea.)   | PAB             | 75513     | 0.7     |
| 7   | Pole Clamp Kit Left* (1 ea.)<br>(incl. 1 item 9)   | CCKL            | 79224     | 3.1     |
| 8   | Pole Clamp Kit Right* (1 ea.)<br>(incl. 1 item 9)  | CCKR            | 79228     | 3.1     |
| 9   | Polew Clamp Top Strap (1 ea.)<br>For use on left or right Pole Clamp Kit                                   | CCKTS           | 79232     | 0.5     |
| 10  | Mounting Bracket Kit<br>(1 Right and 1 Left)   | EZS2MBK         | 75666     | 5.9     |
|     | Cradle Clamp Mounting Kit*<br>for sizes 450-1350mm (18"-54")<br>(incl. 2 items 6 and 1 ea. item 7, 8 & 10) | CCMK            | 78919     | 15.0    |

\*Hardware included  
Lead time: 1 working day

### Tips Required per Cleaner Size

| mm                               | 450 | 600 | 750 | 900 | 1050 | 1200 | 1350 | 1500 | 1800 |
|----------------------------------|-----|-----|-----|-----|------|------|------|------|------|
| in.                              | 18  | 24  | 30  | 36  | 42   | 48   | 54   | 60   | 72   |
| <b>C-Tips or V-Tips Required</b> | 3   | 4   | 5   | 6   | 7    | 8    | 9    | 10   | 12   |

## Section 10 – Other Flexco Conveyor Products

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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:

### Rockline® EZP1 Precleaner



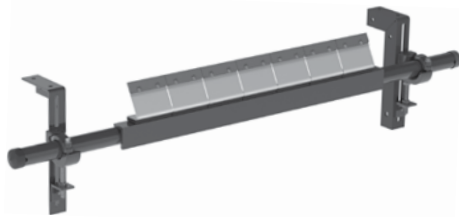
- Patented ConShear™ blade renews its cleaning edge as it wears
- Visual Tension Check™ for optimal blade tensioning and simple retensioning
- Quick and easy one-pin blade replacement Material Path Option™ for optimal cleaning and reduced maintenance

### DRX Impact Beds



- Exclusive Velocity Reduction Technology™ 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

### Rockline® EZS2 Secondary Cleaner



- Long-wearing tungsten carbide blades for superior cleaning efficiency
- Patented FormFlex™ cushions independently tension each blade to the belt for consistent, constant cleaning power
- Easy to install, simple to service
- Works with Flexco mechanical belt splices

### 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

## **The Flexco Vision**

To become the leader in maximising  
belt conveyor productivity for our customers worldwide  
through superior service and innovation.

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