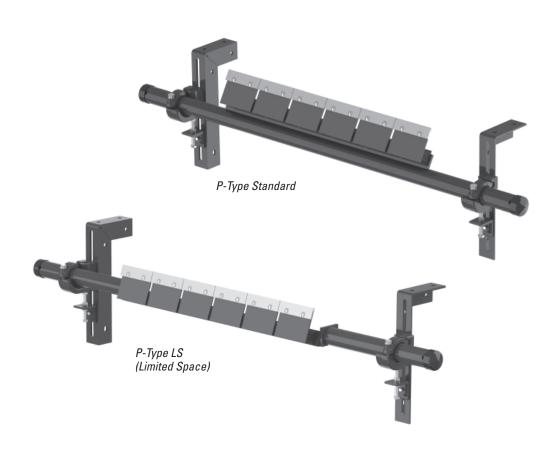
## P-Type® Secondary Belt Cleaner

# Installation, Operation and Maintenance Manual





### **Pre-installation Checks and Options**

### 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

### **Optional Installation Accessories**

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

#### 76024

#### Pole Extender Kit

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

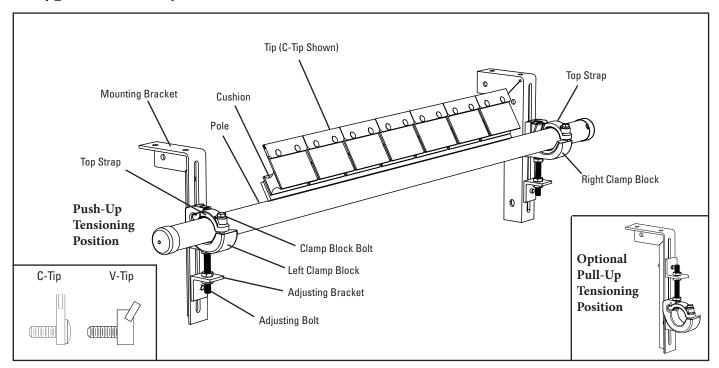


#### **Optional Mounting Accessories**

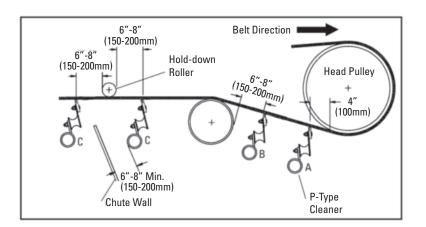
Description	Ordering Number	Item Code	Wt. Lbs.
Pole Extender Kit	MAPEK	76024	21.9
Lead time: 1 working day			

### **Installation Instructions**

### P-Type Secondary Belt Cleaner



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



### **Before You Begin:**

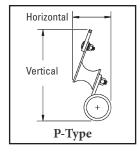
- Double check the tip style needed for your application: C-Tip for mechanically spliced and vulcanized belts.
  - V-Tip for vulcanized belts only.
- For chute mounting it may be necessary to cut an access hole to allow for installation and inspections. (See dimensions in STEP 2.)
- Follow all safety 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.

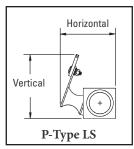
#### **Tools Needed**

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

#### Clearance Requirements for Installation

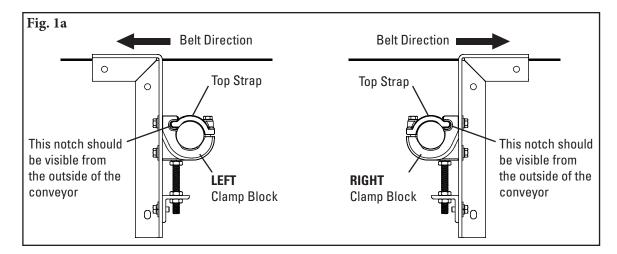
	Vertical	Horizontal
P-Type Cleaner	7" (175mm)	4" (100mm)
P-Type LS Cleaner	5-1/2" (138mm)	5" (125mm)





### **Installation Instructions (cont.)**

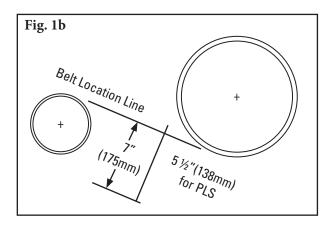
### P-Type Secondary Belt Cleaner



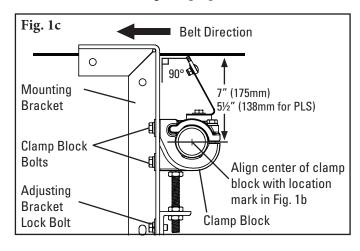
#### 1. Install mounting brackets.

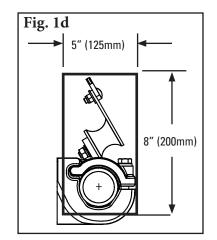
Determine the correct clamp block (left or right) and bracket needed for each side of the conveyor (Fig. 1a). The top strap should be offset away from the belt (you should be able to see the notch for the top strap from the outside of the conveyor).

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 7" (175mm) (5-½"/138mm 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 7" (175mm) (5-½"/138mm 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 7" (175mm) (5-½"/138mm 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.



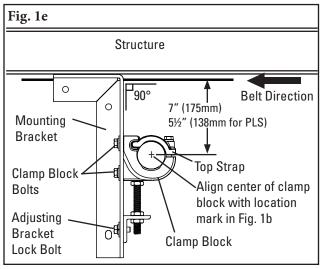


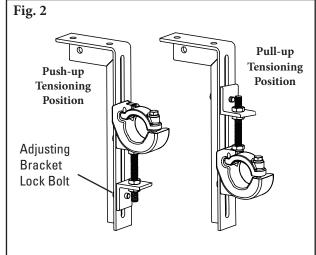


### **Installation Instructions (cont.)**

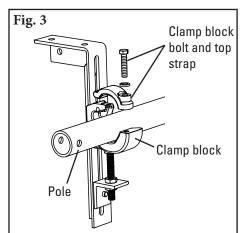
### P-Type Secondary Belt Cleaner

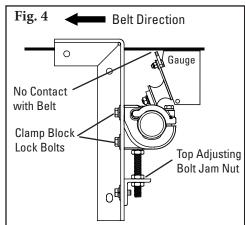
For structure mounting: In most applications the standard mounting brackets will have adequate room to fit on the structure with no cutting. Clamp the mounting bracket into position (use 6" clamps). Move the clamp block to align the center of the block with a point 7" (175mm) (5-½"/138mm for PLS) below 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.





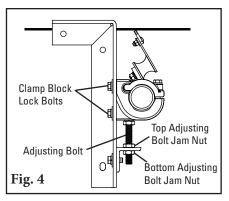
- 2. Choose the tensioner position. The tensioner is shipped mounted in the push-up position. Depending upon the space constraints of the installation, the tensioner can be optionally mounted in a pull-up position. To do this, loosen the threaded rod lock nut, unscrew the threaded rod and remove adjusting 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.



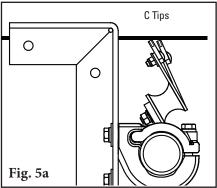


### **Installation Instructions (cont.)**

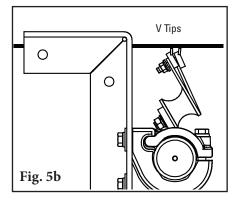
### P-Type Secondary Belt Cleaner



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.

### **Pre-Operation Checklist and Testing**

### **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.

### **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.