# EZP1 Precleaner

## Installation, Operation and Maintenance Manual



FLEXCO

# 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
  - Are there obstructions that may require cleaner location adjustments (see 3.2 – Cleaner Location Adjustments)

## 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.

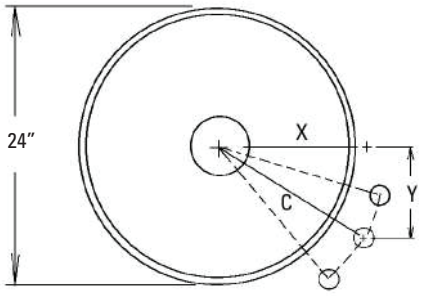
Conveyor situation:

Pulley Diameter: 24"

X = 12"

Y = 9"

C = 15"




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” (50mm)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” (50mm), so we add 2” (50mm) to the given “Y” dimension.

   X = ?"

   Y = 9+2=11"

   C = 15"

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 = 10 1/4"

   Y = 11"

   C = 15"

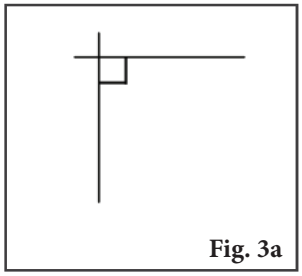


Fig. 3a

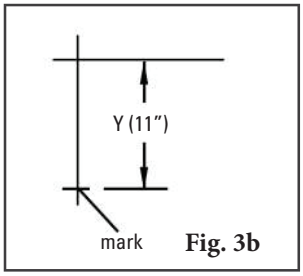


Fig. 3b

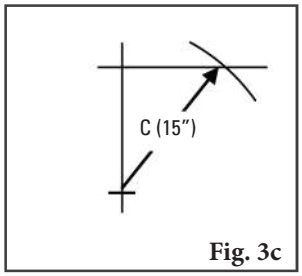


Fig. 3c

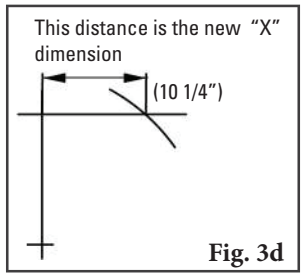
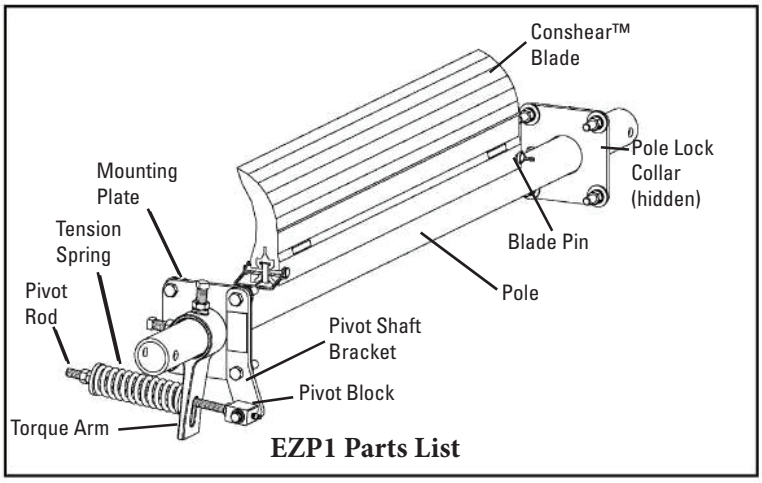


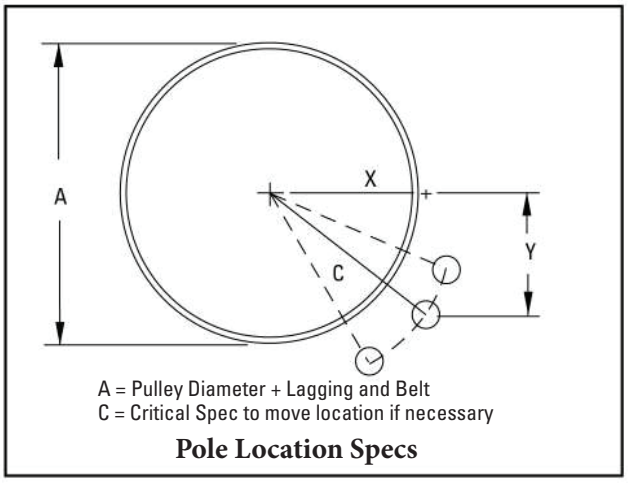
Fig. 3d

# Installation Instructions

## EZP1 Precleaner




**EZP1 Parts List**




**Pole Location Specs**

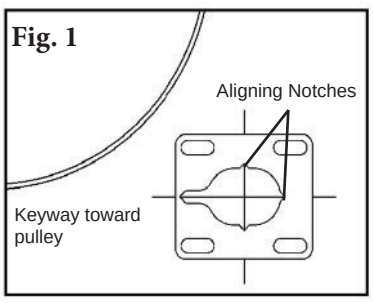
***Physically lock out and tag the conveyor at the power source before you begin cleaner installation.***

Installation specs and instructions are based on the assumption that the conveyor is in its working position (angle). If the conveyor angle will be different, the cleaner should be installed per the final position. Call the BCP Helpline 1-800-253-8132 if you need help on determining the proper coordinates.

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.

2. **Mark and cut the mounting plate holes.** Using the mounting plate template provided in the instruction packet, position the large 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.

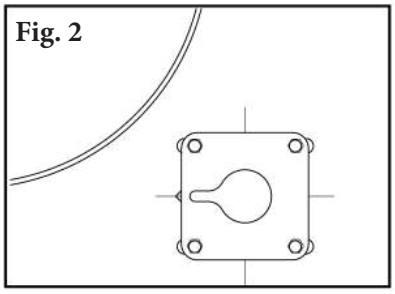
   **NOTE: Hole cutouts are slotted for later adjustment if needed.**

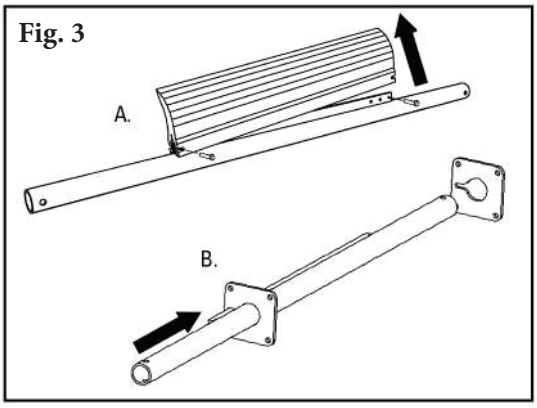


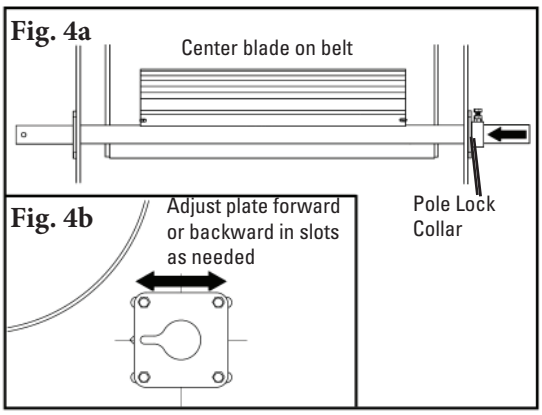

**Pole Location Chart**

| A | | X | | Y | | C | |
|---|---|---|---|---|---|---|---|
| mm | in. | mm | in. | mm | in. | mm | in. |
| 250 | 10″ | 74 | 3″ | 230 | 9″ | 242 | 9 1/2″ |
| 275 | 11″ | 92 | 3 3/4″ | 230 | 9″ | 248 | 9 3/4″ |
| 300 | 12″ | 108 | 4 3/8″ | 230 | 9″ | 254 | 10″ |
| 325 | 13″ | 131 | 5 3/8″ | 230 | 9″ | 265 | 10 1/2″ |
| 350 | 14″ | 146 | 5 7/8″ | 230 | 9″ | 273 | 10 3/4″ |
| 375 | 15″ | 166 | 6 3/4″ | 230 | 9″ | 284 | 11 1/4″ |
| 400 | 16″ | 179 | 7 1/8″ | 230 | 9″ | 291 | 11 1/2″ |
| 425 | 17″ | 195 | 7 7/8″ | 230 | 9″ | 301 | 12″ |
| 450 | 18″ | 207 | 8 1/4″ | 230 | 9″ | 309 | 12 1/4″ |
| 475 | 19″ | 223 | 9″ | 230 | 9″ | 320 | 12 3/4″ |
| 500 | 20″ | 235 | 9 3/8″ | 230 | 9″ | 329 | 13″ |
| 525 | 21″ | 249 | 10″ | 230 | 9″ | 339 | 13 1/2″ |
| 550 | 22″ | 266 | 10 3/4″ | 230 | 9″ | 352 | 14″ |
| 575 | 23″ | 283 | 11 3/8″ | 230 | 9″ | 365 | 14 1/2″ |
| 600 | 24″ | 299 | 12″ | 230 | 9″ | 377 | 15″ |
| 625 | 25″ | 314 | 12 5/8″ | 230 | 9″ | 390 | 15 1/2″ |
| 650 | 26″ | 330 | 13 1/4″ | 230 | 9″ | 402 | 16″ |
| 675 | 27″ | 346 | 13 7/8″ | 230 | 9″ | 415 | 16 1/2″ |
| 700 | 28″ | 360 | 14 3/8″ | 230 | 9″ | 427 | 17″ |
| 725 | 29″ | 374 | 15″ | 230 | 9″ | 439 | 17 1/2″ |
| 775 | 30″ | 389 | 15 5/8″ | 230 | 9″ | 452 | 18″ |
| 775 | 31″ | 403 | 16 1/8″ | 230 | 9″ | 464 | 18 1/2″ |
| 825 | 32″ | 417 | 16 3/4″ | 230 | 9″ | 477 | 19″ |
| 825 | 33″ | 432 | 17 1/4″ | 230 | 9″ | 489 | 19 1/2″ |
| 850 | 34″ | 446 | 17 7/8″ | 230 | 9″ | 501 | 20″ |
| 875 | 35″ | 460 | 18 3/8″ | 230 | 9″ | 514 | 20 1/2″ |
| 900 | 36″ | 474 | 19″ | 230 | 9″ | 526 | 21″ |

# Installation Instructions (cont.)



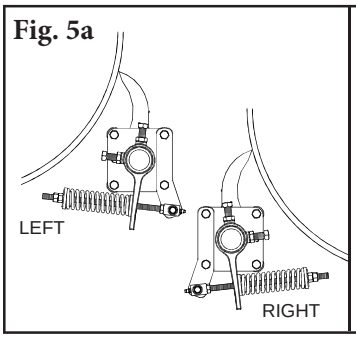

3. **Install the mounting plates.** Bolt the mounting plates to the chute with bolts provided. Center plates on the slotted holes and tighten bolts (Fig. 2).

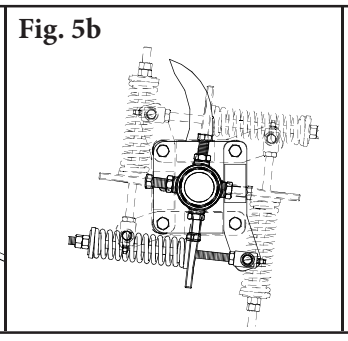
4. **Install the pole.** Remove both blade pins and blade from the pole and insert the pole in through the mounting plates (Fig. 3).

5. **Center the cleaner on the belt and lock in place.** Reinstall the blade with both blade pins. Center the blade on the belt and install the pole lock collar onto the pole (on the end opposite the end to be used for the tensioner), snugly up to the mounting plate (Fig. 4a). Rotate the blade up to the belt and check to insure that the blade is square to the pulley face. If 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. 4b).

   **NOTE: The tensioner is assembled for installation on the left side (as you face the head pulley) of the cleaner. If right side installation is desired, some minor reassembly is required.**
   Refer video on our QR or Youtube.

6. **Install the tensioner.** Determine desired side and position (Fig. 5a) (the tensioner can be installed in any position 360° around the pole as shown in Fig. 5b) and remove the two mounting plate bolts needed to install the pivot shaft bracket. With the pivot rod inserted through the slotted hole of the torque arm, slide the two components onto the pole together. Using the long bolts provided, fasten the pivot shaft bracket to the mounting plate and tighten (Fig. 5c).



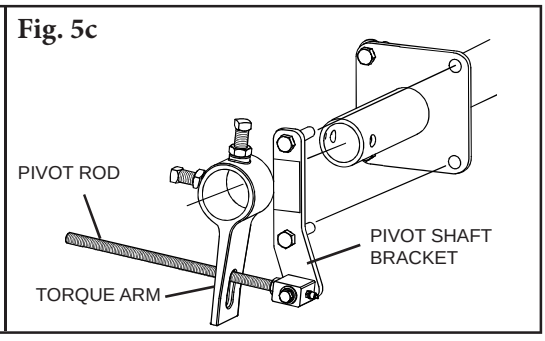
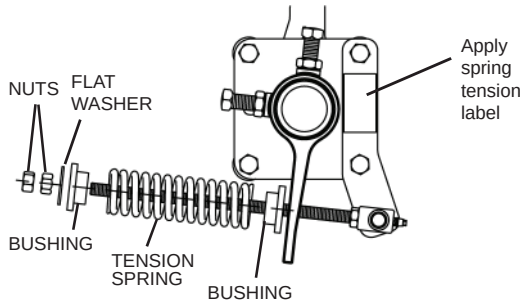



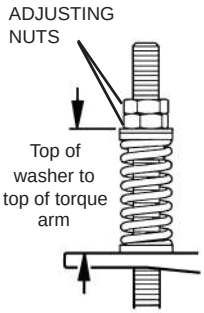
Fig. 6a




**Blade Tension Chart**

| Blade Width | | Purple Springs | | Silver Springs | | Black Springs | |
|---|---|---|---|---|---|---|---|
| in. | mm | in. | mm | in. | mm | in. | mm |
| 10″ | 250 | 5 3/4″ | 146 | 6 1/4″ | 159 | N/A | N/A |
| 16″ | 400 | 5 1/4″ | 133 | 6″ | 152 | N/A | N/A |
| 22″ | 550 | 4 3/4″ | 121 | 5 7/8″ | 149 | N/A | N/A |
| 28″ | 700 | 4 1/4″ | 108 | 5 5/8″ | 143 | N/A | N/A |
| 34″ | 850 | N/A | N/A | 5 3/8″ | 137 | 5 5/8″ | 143 |
| 40″ | 1000 | N/A | N/A | 5 1/8″ | 130 | 5 1/2″ | 140 |
| 46″ | 1150 | N/A | N/A | 5″ | 127 | 5 1/4″ | 133 |
| 52″ | 1300 | N/A | N/A | 4 3/4″ | 121 | 5 1/8″ | 130 |
| 58″ | 1450 | N/A | N/A | N/A | N/A | 5″ | 127 |
| 64″ | 1600 | N/A | N/A | N/A | N/A | 4 3/4″ | 121 |
| 70″ | 1750 | N/A | N/A | N/A | N/A | 4 5/8″ | 117 |

Fig. 6b




7. **Set the blade tension.** Assemble the tensioner by sliding the spring with bushings onto the pivot rod, followed by the large washer and two tension nuts (Fig. 6a). Thread nuts onto the pivot rod to expose 1" of the end. Rotate the pole until the blade contacts the pulley. While pulling the torque arm up to the spring, tighten the torque arm to the pole. Set spring length to determined length (Fig. 6b.) Apply the spring tension label (provided in the instruction packet) to the pivot shaft bracket as shown.

Fig. 7a

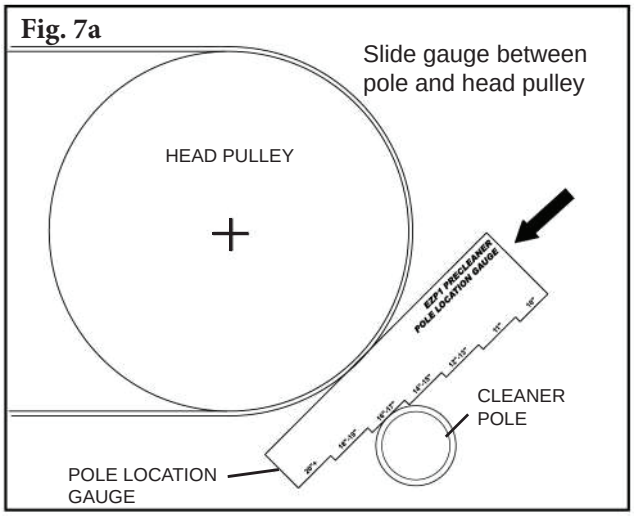
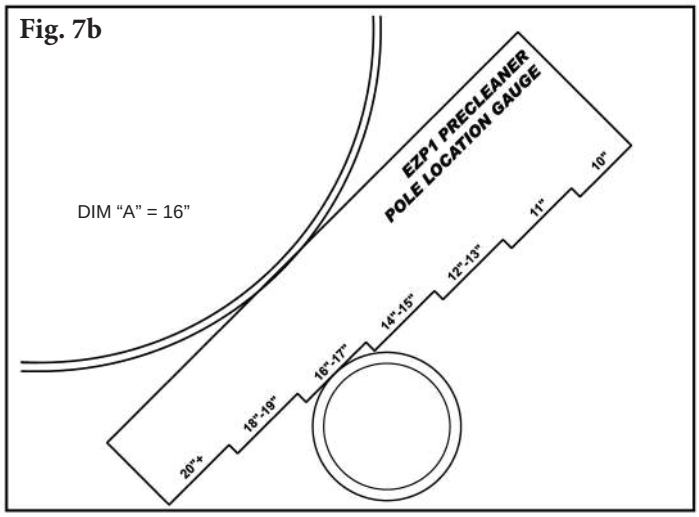



Fig. 7b




8. **Confirm correct pole location.** After the cleaner is installed, slide the Pole Location Gauge (provided in the instruction packet) between the cleaner pole and the pulley, until it stops at a step (Fig. 7a). Read the flat area where the pole is resting (Fig. 7b). This diameter 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.

**Test run the cleaner and inspect the performance.** If vibration occurs or more cleaning efficiency is desired, make the necessary tensioning adjustments.

# 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 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.

**Visit our website or contact your local distributor to learn more.**
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