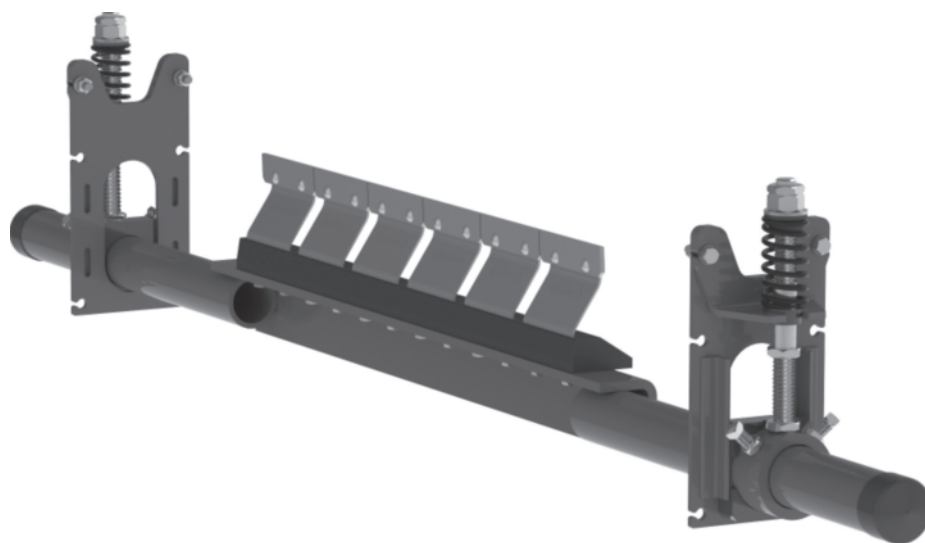


FMS Medium-Duty Secondary with YST Tensioners

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 (see 3.2 Optional Installation Accessories)

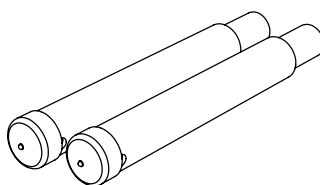
Optional Installation Accessories

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

76024

HD Pole Extender Kit

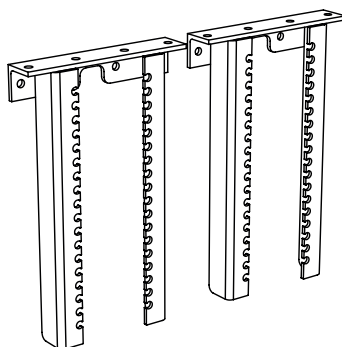
- Provides 30" (750mm) of extended pole length
- Includes 2 pole extenders



79850

YST HD Drop Bracket Kit

- Includes 2 drop brackets



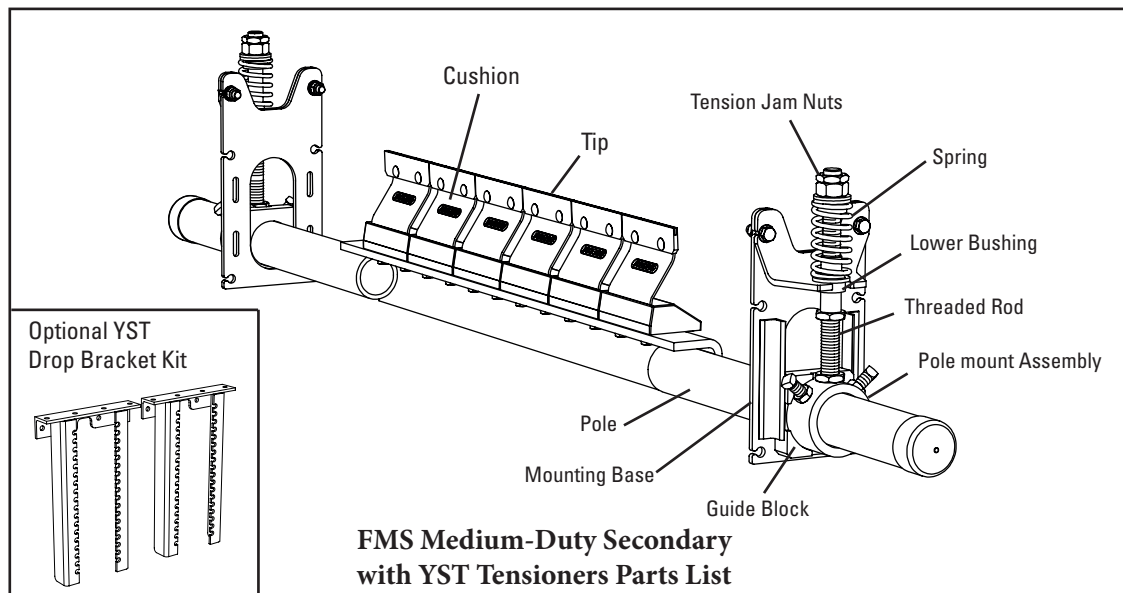
Optional Installation Accessories

Description	Ordering Number	Item Code	Wt. Kg
Pole Extender Kit	MAPEK	76024	9.9
YST HD Drop Bracket Kit	YSTHDBK	79850	14.5

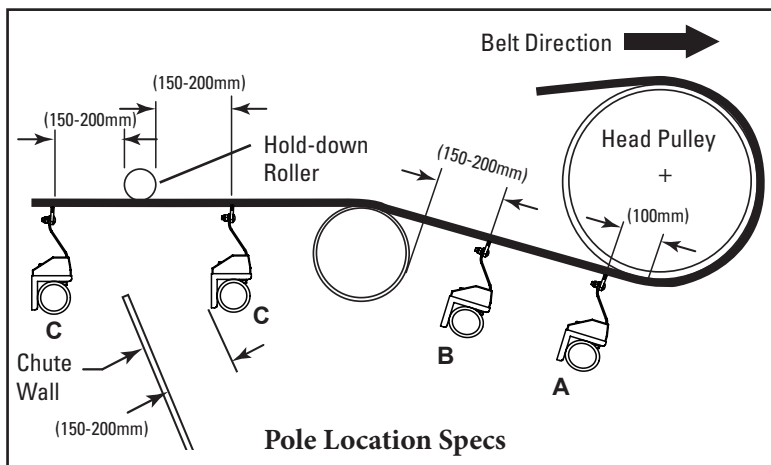
Lead time: 1 working day

Installation Instructions

FMS Medium-Duty Secondary Cleaner with YST Tensioners for belts 18" - 72" (450-1800mm)



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



Tools Needed

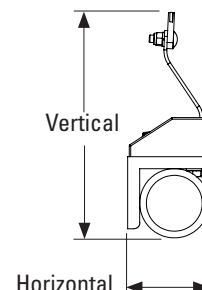
- Adjustable Wrench
- OR
- 10mm Wrench
- 14mm Wrench
- 19mm Wrench
- 25mm Wrench
- 29mm Wrench
- Tape Measure
- Ratchet With 19mm Socket
- (2) 150mm C-Clamps (for Temporary Positioning of Mounting Brackets)
- Cutting Torch and/or Welder
- Marking Pen

Before You Begin:

- For chute mounting it may be necessary to cut an access hole to allow for installation and inspections. (See dimensions in Step 1.)
- Follow all safety precautions when using a cutting torch.
- If welding, protect all fastener threads from weld spatter.
- For cleaner clearance requirements see chart at right.

Clearance Requirements for Installation

HORIZONTAL	VERTICAL
89 mm	245 mm



Installation Instructions

FMS Medium-Duty Secondary Cleaner with YST Tensioners

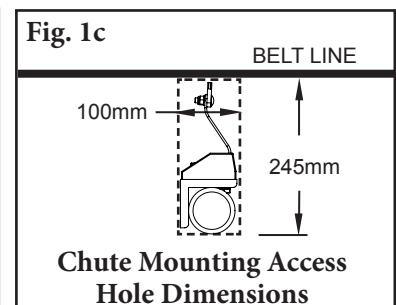
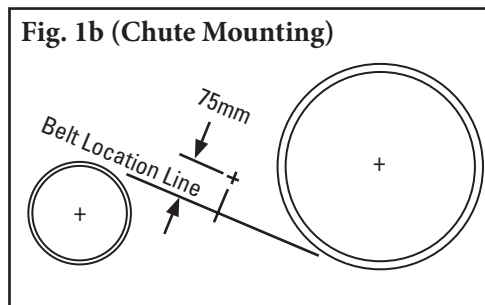
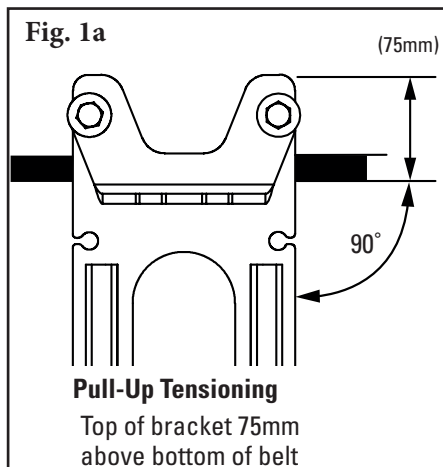
1. Install spring tensioner mounting bases. (For push-up tensioning refer to additional instructions on Page 10.)

Clamp mounting base into position so top flange of base is located the proper distance above bottom of belt (Fig. 1a). With angle bracket positioned as shown in Fig. 1a for pull-up tensioning, bolt first mounting base in place. Locate and mark mounting base position on other side but do not install at this time.

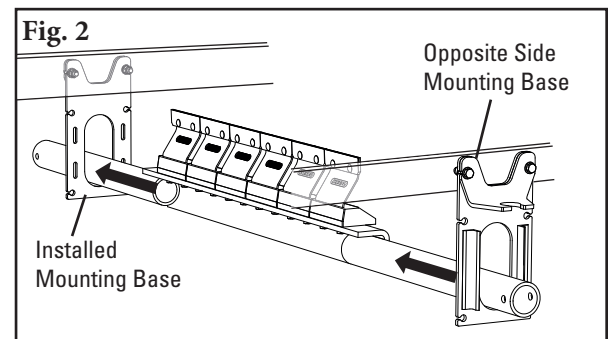
For chute mounting: For chute installation a belt location line must first be established. Draw a line on the chute replicating this location. If head pulley and snub pulley are close, it may be necessary to assume an approximate belt line between the two. In the determined location draw a line perpendicular to the belt line. Make a mark at the proper distance above bottom of belt (Fig. 1b).

Locate a mounting bracket perpendicular to belt location line (Fig. 1b), aligning top mounting bracket flange with mark made in previous step. Bolt bracket in place. Repeat this step on opposite side. Cut access holes using provided mounting template.

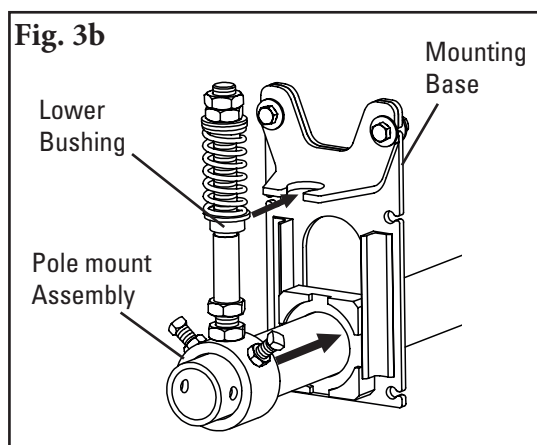
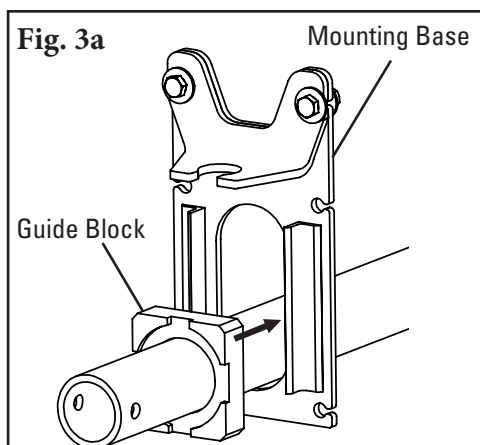
NOTE: The mounting brackets must be aligned perpendicular to the belt.



2. Install pole. Insert pole assembly into installed mounting base from the inside. Then slide opposite side mounting base onto pole and bolt in place (Fig. 2).

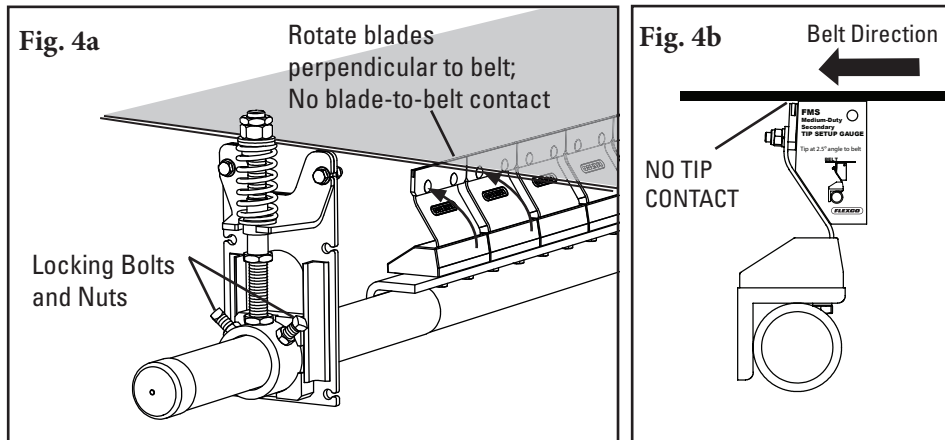


3. Assemble tensioners. Slide guide blocks over each end of pole (Fig. 3a) and position in mounting base as shown (Fig. 3b). Slide tensioner assembly over each end of pole and position lower bushing into mounting base (Fig. 3b).



Installation Instructions

FMS Medium-Duty Secondary Cleaner with YST Tensioners



- Secure pole.** Center pole/ blades on belt and rotate pole (Fig. 4a) until the tips align with the FMS tip setup gauge provided (Fig. 4b). Tighten the two locking bolts and nuts on each pole mount assembly to lock pole in place (Fig. 4a). There should be no blade-to-belt contact while locking the pole in the correct position. If contact occurs, double check the dimension from Step 1.
- Set blade tension.** Loosen top tension jam nut on both sides and turn nuts until correct spring compression is reached (Fig. 5). Spring compression is determined by spring length. See chart below for correct spring length for your belt width.
- Set adjusting rod sleeve.** After setting blade tension, screw adjusting rod sleeve up into UHMW bushing until 40mm is showing (Fig. 6). Tighten adjusting rod sleeve jam nut.

Fig. 5 shows a side view of the tensioning mechanism with labels: 'Tension Jam Nuts' and 'Top of Washer to Top of Flange'.

FMS with YST HD Spring Length Chart

Blade Width	Blue Springs	Silver Springs	Black Springs
450	88	N/A	N/A
600	82	95	N/A
750	76	92	95
900	69	92	95
1050	63	88	92
1200	N/A	85	88
1350	N/A	82	88
1500	N/A	79	85
1800	N/A	N/A	79

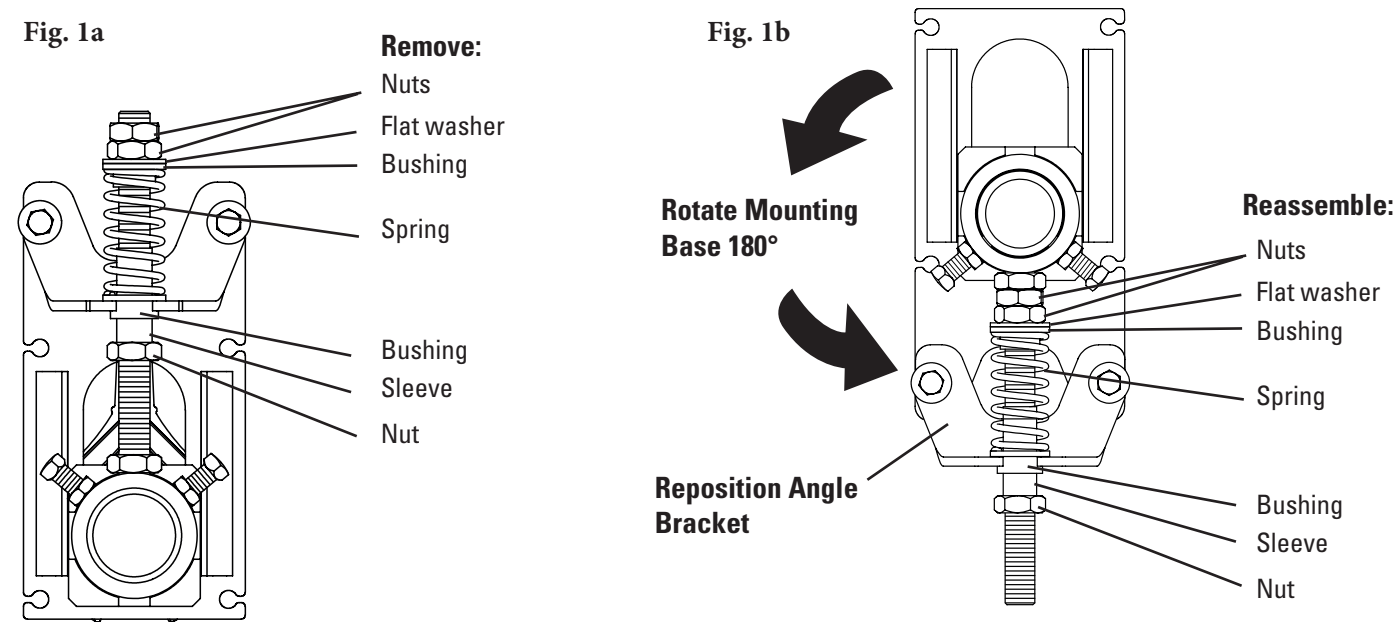
Shading indicates preferred spring option.

Fig. 6 shows a side view of the adjusting rod sleeve with labels: 'Leave 40mm exposed', 'Jam Nut', and 'Adjusting Rod Sleeve'.

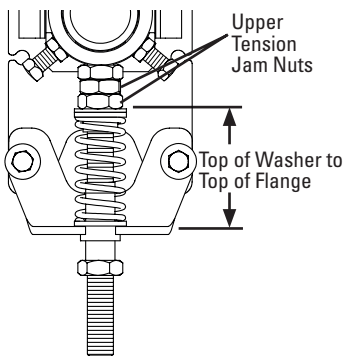
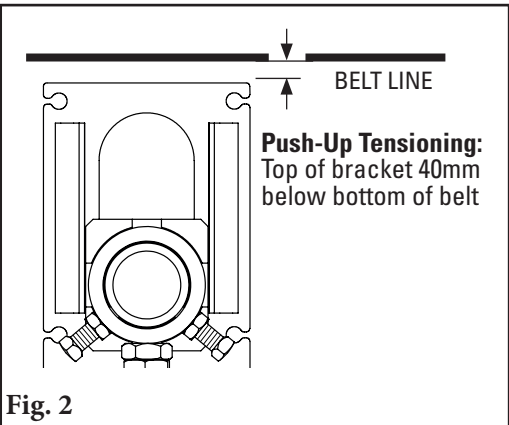
- Test run the cleaner and inspect the cleaning performance.** If vibration occurs or more cleaning efficiency is desired, increase the blade tension by making 3mm compression adjustments on the tension springs.

Installation Instructions (cont.)

FMS Medium-Duty Secondary Belt Cleaner with YST Tensioners Push-Up Tensioning Option



- 1. Reconfigure the standard pull-up tensioner to the push-up style.** Remove 3 nuts, flat washer, 2 bushings, spring, and sleeve (Fig. 1a). Rotate the mounting base so the two flanges point downward and reposition the angle bracket as shown in Fig. 1b. Reassemble components on threaded rod in the order shown (Fig. 1b).
- 2. Install the tensioner mounting bases.** Mount the bases to the structure or chute so that the tops of the bases are 1-1/2" (40mm) below the bottom of the belt (Fig. 2).
- 3. Install the cleaner pole and set the blade angle.** Follow installation steps 2-4 from the cleaner instructions on Page 8 and 9. **Note:** be sure the lock bolts on the torsion pole mount have been securely tightened to lock the pole in place before moving to Step 4.
- 4. Set the blade tension.** Turn the 2 upper tension nuts until the spring is compressed to the length shown on the Spring Length Chart below. Tighten the 2 tension nuts together to prevent loosening.



FMS with YST HD Spring Length Chart

Blade Width	Blue Springs	Silver Springs	Black Springs
450	88	N/A	N/A
600	82	95	N/A
750	76	92	95
900	69	92	95
1050	63	88	92
1200	N/A	85	88
1350	N/A	82	88
1500	N/A	79	85
1800	N/A	N/A	79

Shading indicates preferred spring option.

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
- If vibration occurs or more cleaning efficiency is desired, increase blade tension by making 3mm compression adjustments on the tension springs.
- 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.

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

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