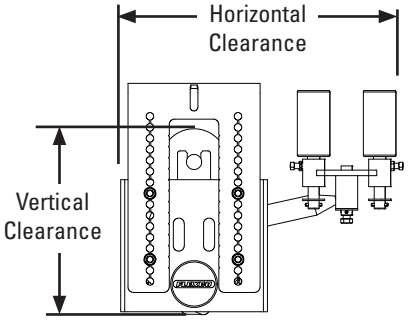
Section 3 - Pre-installation Checks and Options

3.1 Checklist

- Check the model and size of the belt trainer. Is it the right one for your beltline?
  1. If using a return-side trainer, verify the trainer is the correct choice for the belt. Flat return trainers are only effective on flat return belts. For V-returns, contact Flexco.
- Check the PT Max™ Adjustable to be sure all the parts are included in the shipment.
  1. Trainer
  2. Rollers
  3. Mounting hardware
  4. Instruction kit
- Review the "Tools Needed" section on the front of the installation instructions.
- Prepare the conveyor site:
  1. Identify the point(s) of mistracking, expecting 150'–200' (45–61 m) of downstream influence.
  2. Position the unit 20' (6.1 m) after the start of the mistracking.
  3. Identify an opening per clearance dimensions pictured below.
  4. Remove any existing tracking devices that fall in the estimated tracking range.
  5. If the conveyor has disc idlers, replace one idler before and one idler after the location where the trainer will be installed with a standard idler.

Horizontal Clearance	Standard Duty		Heavy Duty	
	36" - 48"	54" - 60"	54" - 60"	72" - 84"
Return/Top/V-Return	33"	37"	38"	52"
Vertical Clearance	**Standard Duty**		**Heavy Duty**	
Return/Top	17"		20"	
V-Return	18"		20-1/2"	

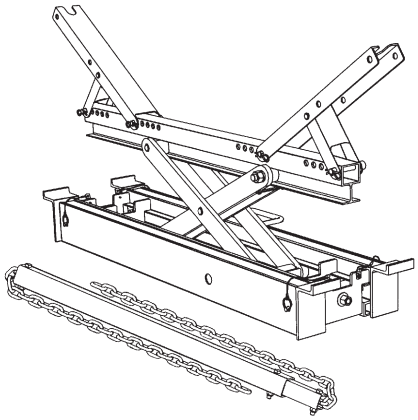


3.2 Optional Installation Accessories

Optional tools can make the installation of the PT Max™ Adjustable Belt Trainer easier and faster.

Flex-Lifter™ Conveyor Belt Lifter

Description	Ordering Number	Item Code
Medium Flex-Lifter 36" - 60" (900 - 1500 mm)	FL-M	76469
Large Flex-Lifter 48" - 72" (1200 - 1800 mm)	FL-L	76470
XL Flex-Lifter 72" - 96" (1800-2400 mm)	FL-XL	76983



Flex-Lifter™ Conveyor Belt Lifter

The Flexco Flex-Lifter makes the job of lifting the conveyor belt easy and safe. Using two Flex-Lifters, the belt can be quickly lifted out of the way to install the PT Max™ Adjustable. The Flex-Lifter has the highest safe lift rating available at 4000 lbs. (1810 kg) for Medium and Large, and 6000 lbs. (2750kg) for XL. And it's versatile. It can also be used to lift topside or return side belt for splicing, idler replacement or other maintenance jobs. Available in three sizes: Medium for belt widths 36"–60" (900 - 1500mm), Large for belt widths 48"–72" (1200 - 1800mm), and XL for belt widths 72"–96" (1800 - 2400mm).

Section 4 - Installation Instructions - PT Max™ Adjustable

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

Before You Begin:

- These instructions are designed to be used when installing either the Top Side, Return Side, or V-Return models.
- A serial number label is located on the top frame of the unit. Please use this number in any correspondence.
- The PT Max™ Adjustable has been purposely designed with a much heavier construction than conventional tracking devices. It is, in most cases, TOO HEAVY to manage manually. Please use the necessary mechanical lifting equipment (crane, come-alongs, etc.) for safe installation.
- The trainer should not be positioned closer than 20 feet (6M) from the tail pulley, take-up pulleys, or head pulley.
- Follow all safety precautions when using a cutting torch.

Tools Needed:

- Tape Measure
- 15/16" Wrench
- 1-1/8" Wrench
- Medium or Large Adjustable Wrench
- (2) Pipe Wrenches
- Cutting Torch
- (2) Come-Alongs (3/4 Ton Minimum)
- Any necessary equipment for moving and lifting heavy components

Section 4 - Installation Instructions

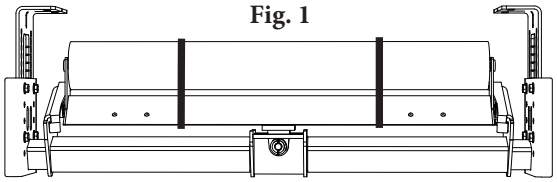
Conveyor Site Preparation

1. **Identify the point(s) of mistracking, expecting 100' (30M) of downstream influence.**
2. **Position the unit 20' (6 M) after the start of the mistracking.**
3. **Identify an opening of at least 20" (506mm) for Standard model, or 21-1/2" (546mm) for HD model.**
4. **Remove any existing tracking devices that fall in the estimated tracking range of the PT Max™ Adjustable. Multiple different tracking devices may reduce or prevent the PT Max Adjustable from tracking as intended. This also includes disc idlers.**

PT Max™ Adjustable Preparation and Installation on the Conveyor

1. **Remove the sensor roller assemblies from the box.** Pull the components out of the box and set aside for installation after the unit is installed on the conveyor.
2. **Ensure idlers are secured in the unit.** Do not remove plastic ties from idlers yet. Failure to ensure the idlers are secure may result in serious injury if an idler falls out (Fig. 1).

Fig. 1



3. **Adjust/telescope extending brackets to match width of structure.** The PT Max will arrive with a measurement from CEMA standards (belt width +9"/225mm). After measuring the structure, slide extending bracket horizontally until mounting brackets are in line with your structure width. A square head set screw on the inside of the base frame is provided to tighten extending bracket. Ensure mainframe is centered within 1/8" (3mm) on the extending brackets (equal length of extenders showing on both sides (Fig. 2). Please note the minimum/maximum extension below.

Fig. 2

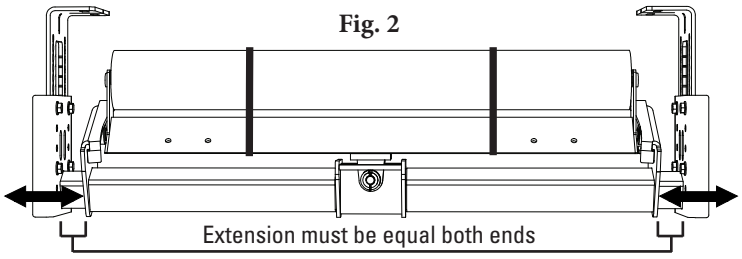
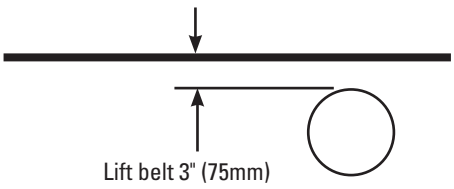


Fig. 3

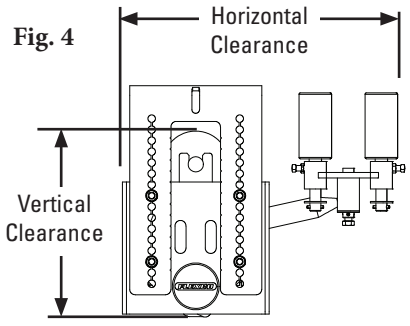


4. **Lift the belt where the trainer will be installed.** At the site where the trainer will be installed, lift the belt 3" (75mm) off the rollers that will be replaced (Fig. 3). **CAUTION:** Some lifting equipment or tools may be required depending upon the weight of the belt.

5. **Remove existing idler.** Unbolt the return roller and mounting brackets and remove it from the conveyor. **NOTE:** If the conveyor has disc idlers, replace one idler before and one idler after the location where the trainer will be installed. Disc idlers can negatively impact the performance of the PT Max Adjustable's pivot/tilt function.

6. **Verify clearance for the lower sections of the PT Max Adjustable where it is to be located on the conveyor (Fig. 4).** With site engineer's approval, remove any obstructions such as structure supports or separation pans.

Fig. 4



Horizontal Clearance	Standard Duty		Heavy Duty	
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Return/Top/V-Return	33"	37"	38"	52"
Vertical Clearance	**Standard Duty**		**Heavy Duty**	
Return/Top	17"		20"	
V-Return	18"		20-1/2"	

Section 4 - Installation Instructions

7. **Move the unit into position on the conveyor.** Locate the trainer on the conveyor where the idler was removed. Check that the belt direction labels are pointing in the direction of belt travel. The design of the mounting brackets offers a variety of installation options.

8. **Secure the PT Max Adjustable unit to the conveyor structure.** Square and center the unit with the structure. Secure the unit to the structure with mounting bolts, lock washers and nuts, and tighten. Remove plastic ties from all idlers.

9. **Determine the roll height or drop of leading and trailing idler.** Using the adjustable mounting brackets, alter the height of the unit to provide 1/2" to 1" (13 to 25mm) lift on the belt (Fig. 5). Lifting the belt higher can restrict pivot/tilt movement.

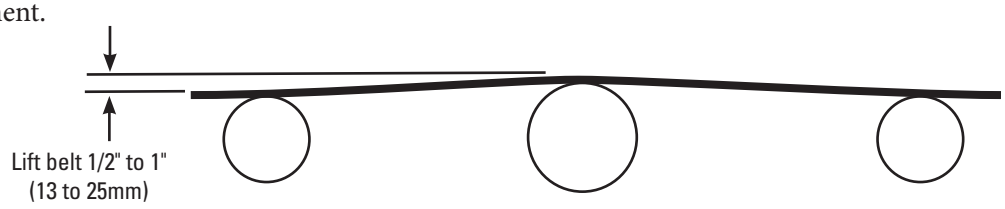

Fig. 5

10. **Lower the belt onto the trainer.**

11. **Insert sensor rollers into the unit.** Insert the sensor roller assemblies into the sensor roller arms in the working (outward) position (Fig. 6). Assemble the lock washers and nuts finger tight, allowing the sensor rollers to hang down (Fig. 7).

12. **Remove shipping lock bracket from base frame (Fig. 8).** Failure to do so will prevent the trainer from functioning as intended.

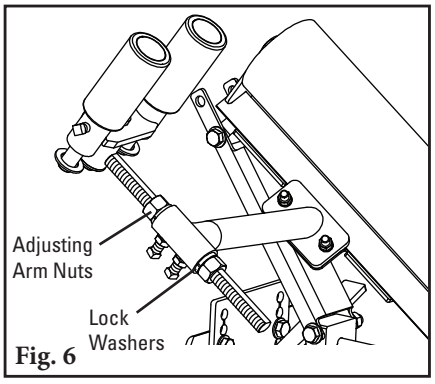

Fig. 6

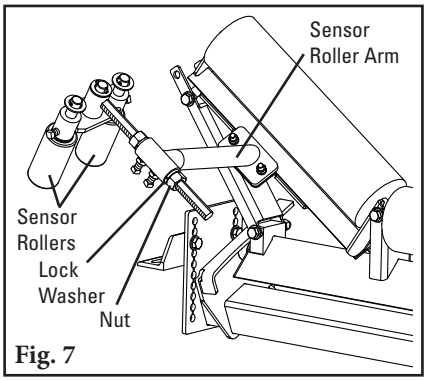

Fig. 7

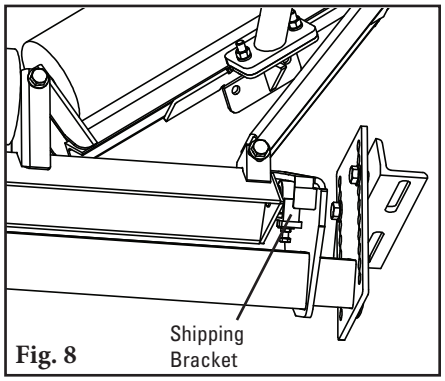

Fig. 8

13. **Check for clearance as the unit moves.** Pivot the unit in both directions to ensure there are no obstructions to its movement. **Note:** Unit may be difficult to move manually due to the weight of the belt.

14. **Adjust unit to the belt. Note:** Final adjustments of the trainer to the beltline depend on where the belt is currently running on the structure. If the belt is running centered on the structure see Option 1; if it is not centered on the structure use the adjustment steps in Option 2.

    Option 1 (Belt centered on structure): Position the sensor rollers to the belt edges. Rotate the sensor rollers into the upright position and adjust to ¾" (19mm) from the belt edges by using the adjusting arm nuts (Fig. 9).

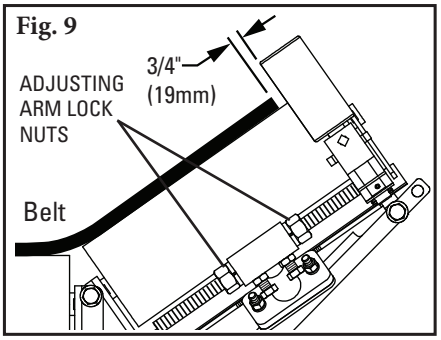

Fig. 9

Option 2 (Belt not centered on structure): Pivot the unit forward on the side the belt is running off. Rotate the sensor rollers into the upright position and adjust the adjusting arms so the sensor rollers on the side running off are just touching the belt edge and the opposite side sensor rollers have a 1-1/2" (38mm) clearance gap (Fig. 10).

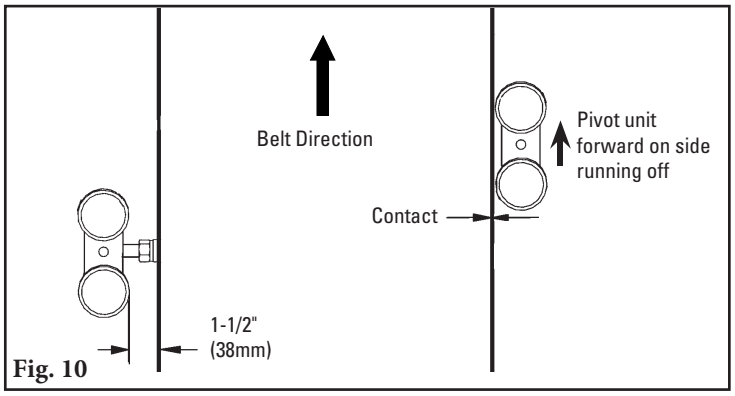

Fig. 10

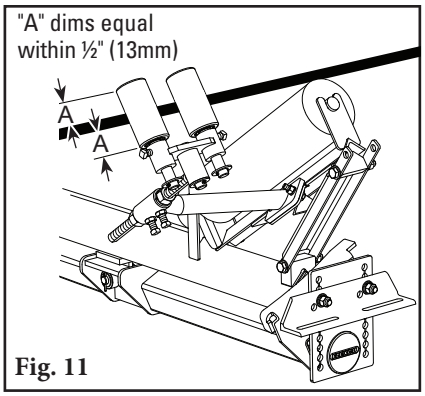

Fig. 11

16. **Check the belt's running location on the face of the sensor rollers.** For maximum results, the belt's line of travel must be centered on the face of the sensor rollers within ½" (13mm) (Fig. 11).
If the belt is not centered:

Option A. Lower the sensor rollers to center on the belt, or for more clearance if needed (this will lower the sensor rollers 1" (25mm)), remove the swivel mount retaining pin and retaining washer and slide the swivel mount out of the adjusting arm. Rotate the adjusting arm 180° and reinsert the swivel mount, retaining washers and retaining pin (Fig. 12).

Option B. Shim the unit to lower or raise the sensor rollers in relation to the belt. Insert shims (washers or other material—not supplied) under either the front or rear mounting bracket on both sides of the unit (Fig. 13).

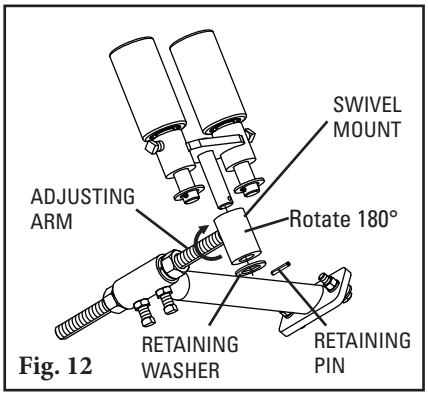

Fig. 12

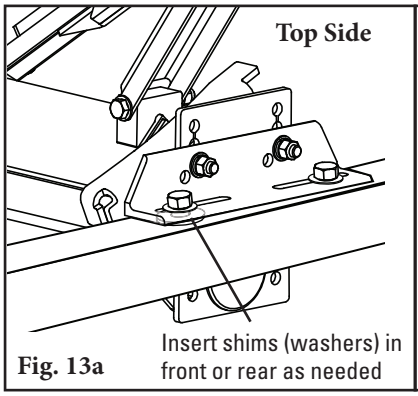

Fig. 13a

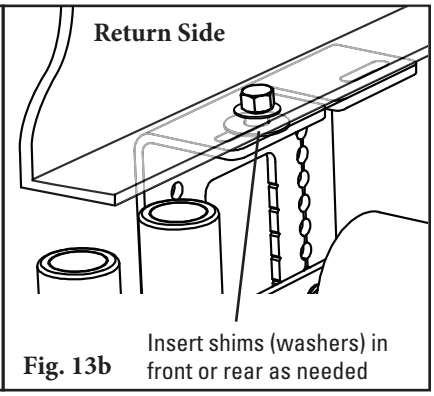

Fig. 13b

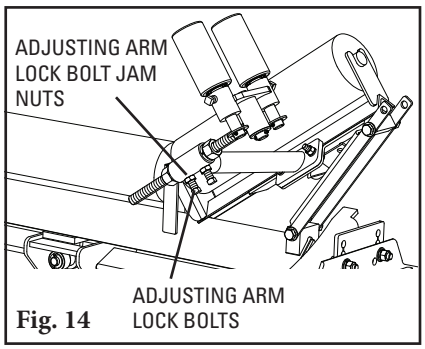

Fig. 14

17. **Lock the adjusting arms in place (Fig. 14).** Once the training path has been set and confirmed, loosen the adjusting arm lock bolt jam nuts and tighten the adjusting arm lock bolts. Re-tighten the adjusting arm lock bolt jam nuts. Repeat on opposite side.

18. **Run the conveyor to verify the training results.** If adjustment is needed, adjust one set of sensor rollers in and the opposite side out an equal amount. **NOTE:** If the conveyor has disc idlers, the belt may not get the full downstream tracking effect.

Section 5 - Pre-Operation Checklist and Testing

5.1 Pre-Op Checklist

- Recheck that all fasteners are tight
- Apply all supplied labels
- Be sure that all installation materials and tools have been removed from the belt and conveyor area

5.2 Test Run the Conveyor

- Run the conveyor for at least 15 minutes and confirm the belt is tracking properly.
- If belt is still mistracking too far to one side, bring that sensor roller in toward the center. Make adjustments of 1/4" (6mm) at a time **(Fig. 1)**. Do not pinch the belt between the sensor rollers - sensor rollers overall should be 1-1/2" (38mm) wider than the belt **(Fig. 2)**.

NOTE: If the conveyor has disc idlers, the belt may not get the full downstream tracking effect.

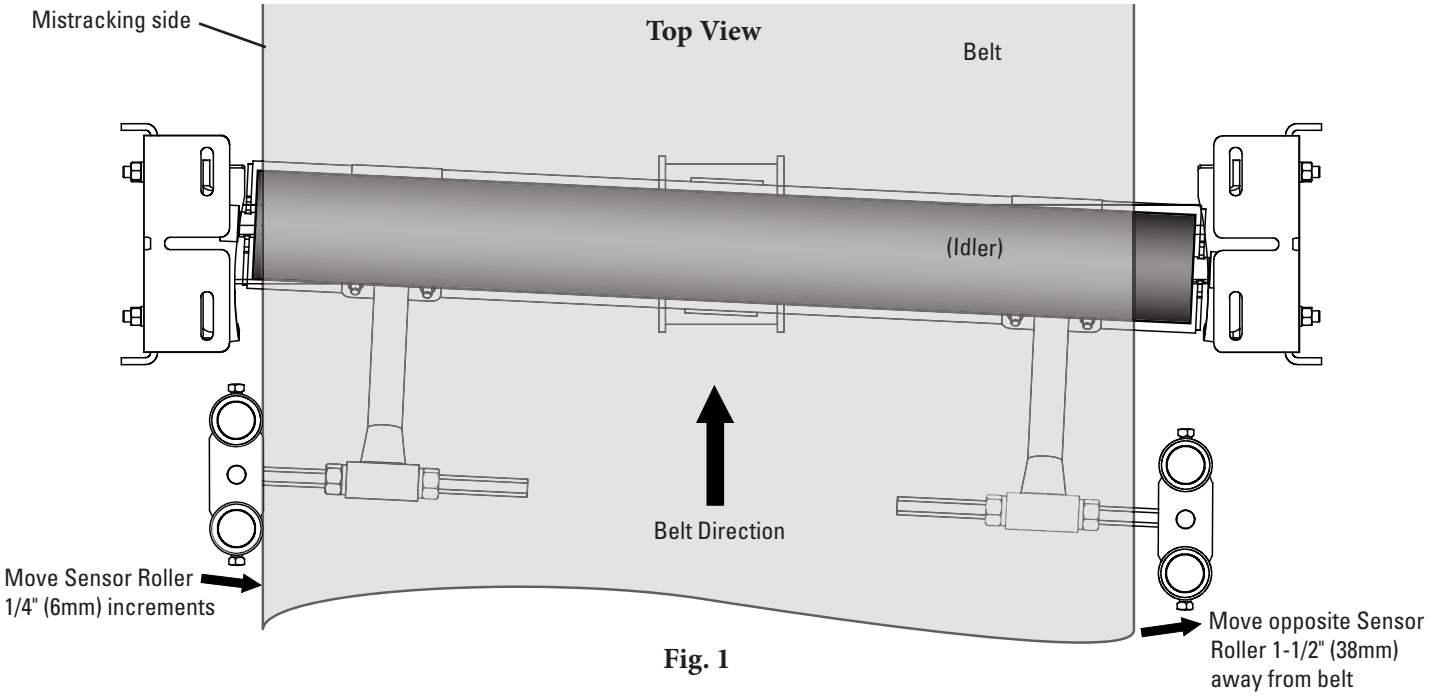

Fig. 1

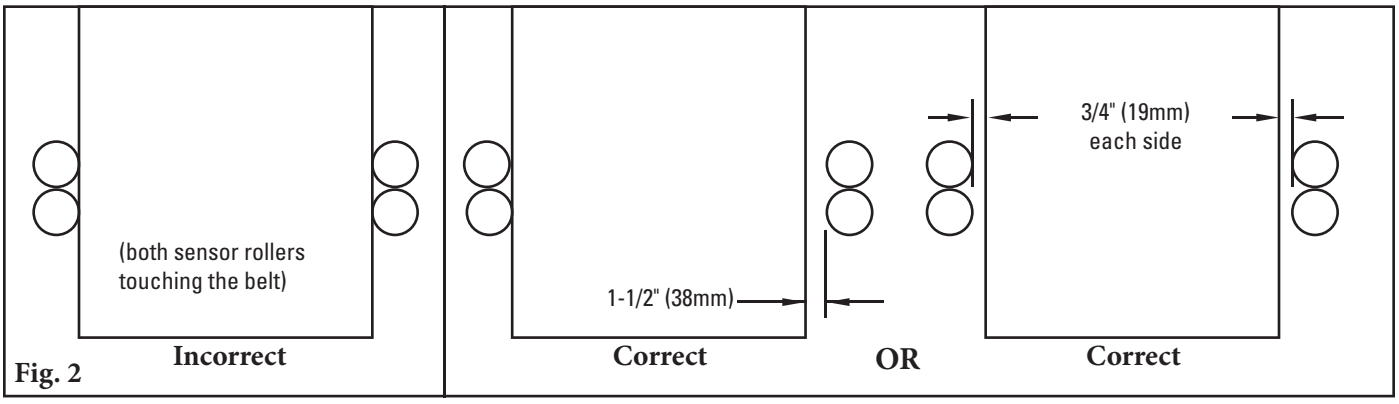

Fig. 2

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

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