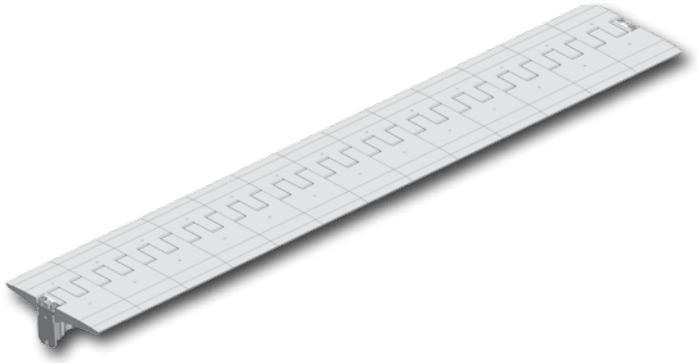
Segmented Transfer Plate Installation Instructions

Parts Included in Transfer Plate Kit:

- Transfer Plate Support Bar (1)
- Center Segment
- Right End Segment (1)
- Left End Segment (1)
- Mounting Bracket Assemblies (2)
  - Back Plate (2)
  - Front Plate (2)
  - Shims (8 – In two strips of four)
  - Socket Head Screws (4)
  - Washers (4)



Tools Required for Installation:

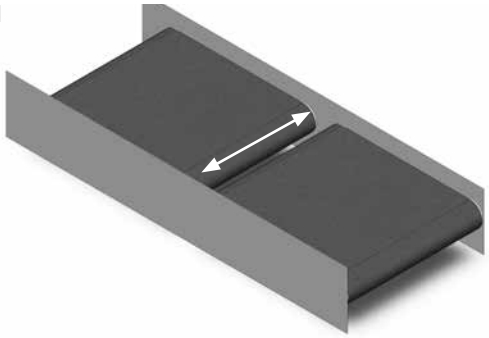
- Tape Measure
- 5/32" Allen Wrench
- Rubber Mallet
- Marking Pen/Soap Stone
- Hand Held Band Saw or Hack Saw
- Welder
- Welding Accessories
- Thread Locking Agent

Optional Bolt Mount Tool Requirements:

- H Drill Bit (or 17/64")
- Transfer Punch
- #10 Flat head cap screw 1" long (2)
- #10 Socket head cap screw 1" long (2)
- #10 Flat washers (4)
- #10 Lock washers (4)
- #10 Nuts (4)

Follow site lockout and tag out procedures prior to performing any work on the conveyor system.

Fig. 1



1. Measure internal width of the structure at the desired installation location **(Fig. 1)**.
   - If structure is not available to attach mounting brackets, please add the necessary structure to allow for proper installation.

2. Cut the support bar 3/8" (9 mm) less than the measured internal width of the structure. Deburr/file any sharp edges.

Fig. 2

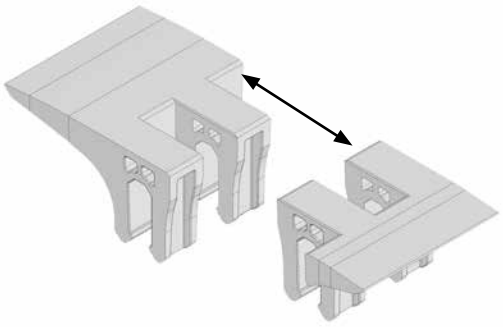
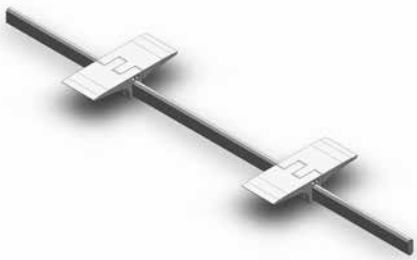
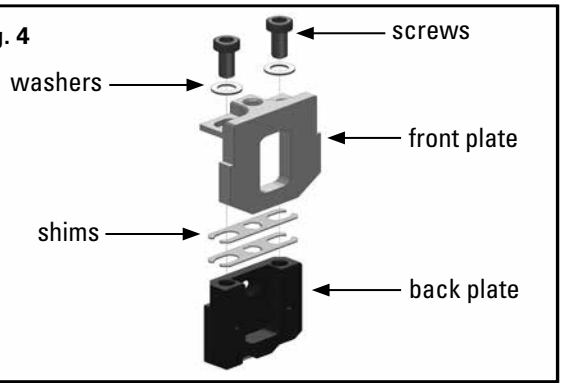


Fig. 3



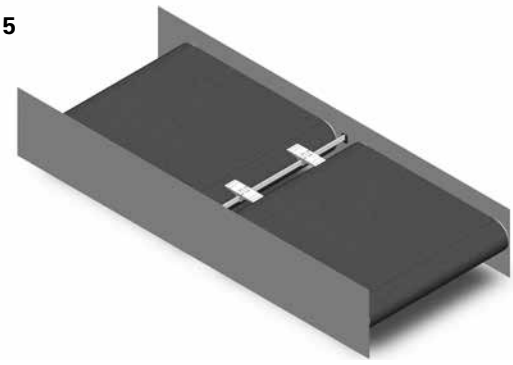
3. Slide one segment pair **(Fig. 2)** onto the bar from each end and position each approximately 1/4 of the total bar length from the end **(Fig. 3)**.

Fig. 4



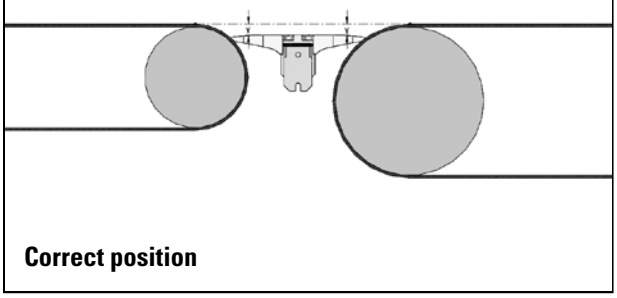
4. Stack two shims on top of back plate of each mounting bracket. Using socket head screws and washers, attach front plate to the back plate ensuring that the shims are in place. Align the edges of the front and back plates so that the vertical edges are parallel. Tighten screws to compress shims ensuring no interference with the pole end. **(Fig. 4)**.

Fig. 5



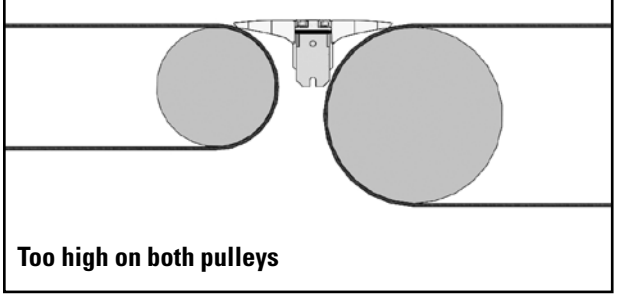
5. Slide one mounting bracket assembly onto each end of the bar. Position the support bar with segments and mounting brackets into the transfer gap. **(Fig. 5)**.

Fig. 6



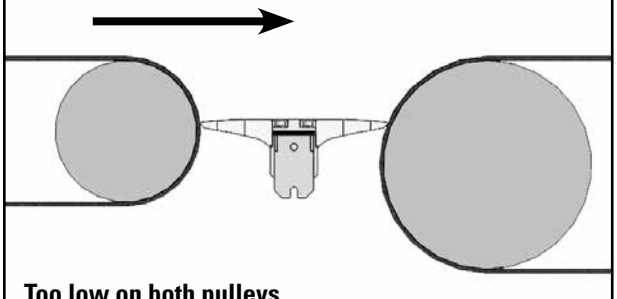
Correct position

Fig. 7



Too high on both pulleys

Fig. 8

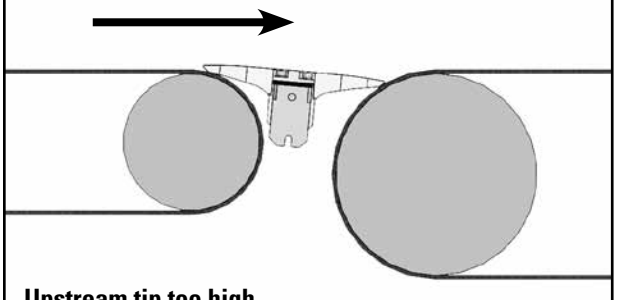


Too low on both pulleys

6. Horizontal positioning instructions:

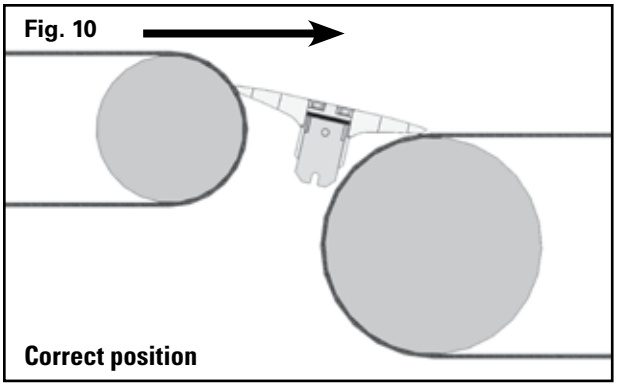
- Locate the point on the top of each pulley where the belt is tangent to the OD of the pulley (where the belt starts to wrap around the pulley). Position the support bar such that the narrow tip of each segment of the segment pair is the same distance below the tangent point on each pulley. This will position the surface of the segment pairs parallel with the belt surfaces. **(Figures 6, 7, 8)**.
- When the bar is correctly positioned, the surface of the segment pairs should be between 1/2" (13 mm) and 1-1/2" (38 mm) below a line between the tangent points on the pulleys (Fig. 6, dimensions Y).

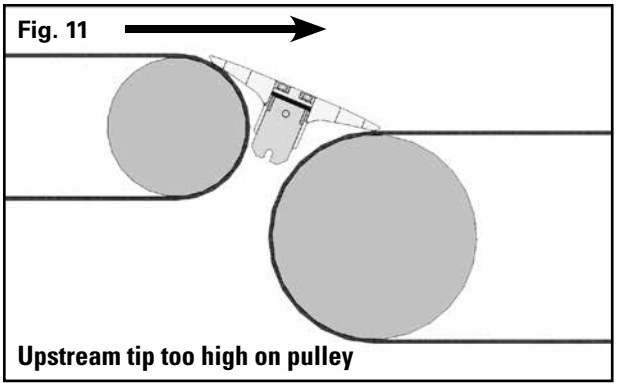
Fig. 9

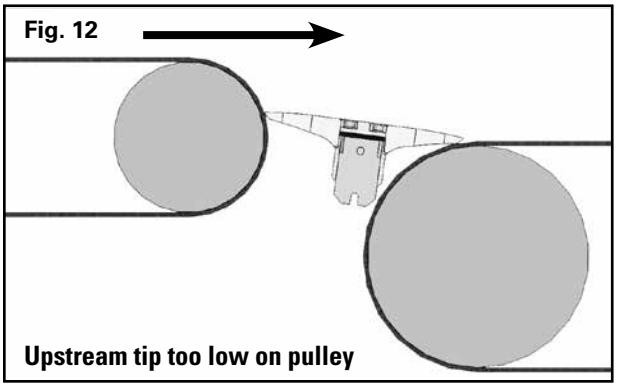


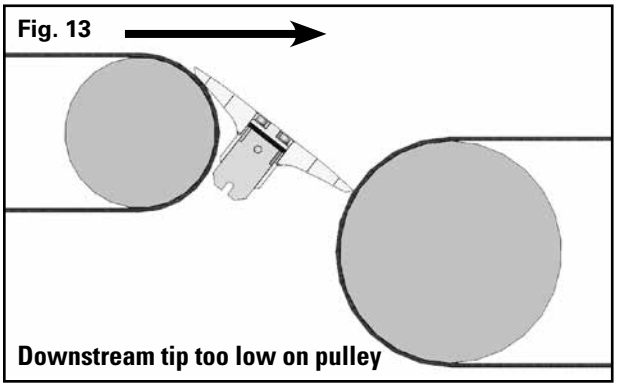
Upstream tip too high

- The upstream tip of the segment pair should never be at or above the tangent point. This will result in damage to the conveyed product as well as to the guard segments **(Fig. 9)**.





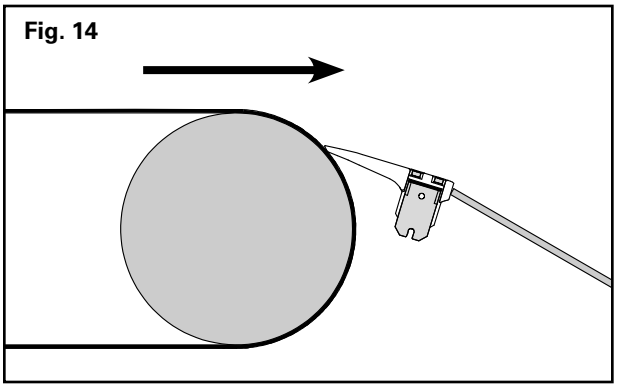




Staggered positioning instructions:

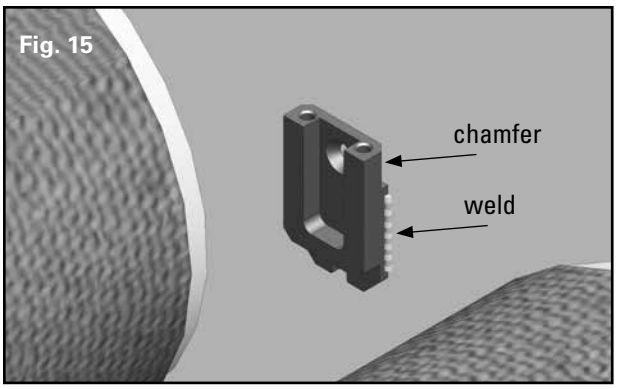
- Position the bar so that the upstream tip of the segment pair is between 1/2" (13 mm) and 1-1/2" (38 mm) below the tangent point on the upper pulley. Position the downstream tip at or near the tangent point on the lower pulley. The correct positioning of the upstream tip should take precedence over the positioning of the downstream tip **(Figures 10, 11, 12, 13)**.

Note: For installations where one or both of the belts have a profiled top cover, such as Longitudinal Rib (LR), Mini Rough Top (MRT), or Rough Top (RT) belting, the transfer assembly should be positioned with a 0.012" clearance (thickness of a business card) between the surface of the profiled belt and the under-side of segment.



Belt to chute or slide installation instructions using bridge segment:

- Position the bar in a location that places the bridge segment against the back wall surface of the chute or slide. The top surface of the bridge segment should be roughly 1/8" to 1/2"above the top of the chute/slide back wall. The belt side segment should be positioned no higher than 1/2" below the crown of the head pulley but above the horizontal center of the head pulley **(Fig. 14)**. The installed Segmented Transfer Plate with Bridge Segment angle should roughly follow the slope of the chute/slide.

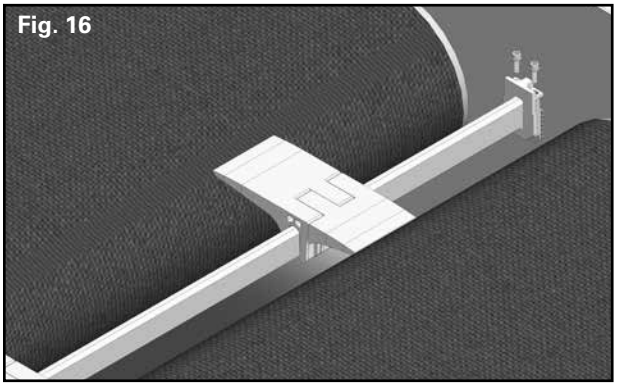


7a. Welding instructions:

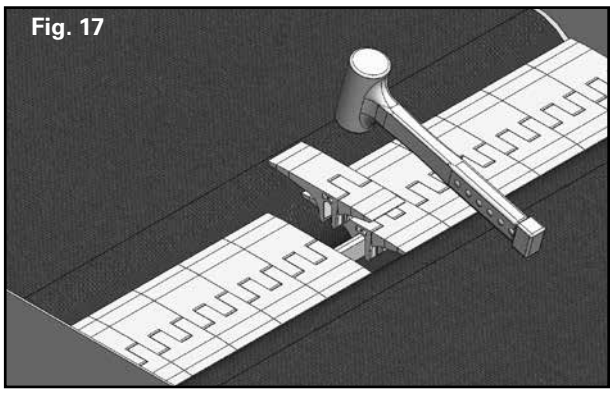
- With the assembly in place, tack weld the back plate onto the structure. **NOTE: Do not weld on the chamfered portion of the back plate corner as a weld bead may interfere with end segment installation (Fig. 15)**.
- Verify location after tack weld and adjust as needed.
- Remove the socket head screws from the mounting brackets and lift the assembly out of the transfer leaving only the back plates in place. Taking care not to lose them, ensure that the shims are removed with the assembly.
- Finish welding the back plates to the structure.

7b. Optional Bolted Mount:

- With the assembly in place, use the marking pen to trace the outline of both back plates.
- Remove assembly.
- Line up one back plate within the outline, and use marking pen to mark the top and bottom hole locations.
- Remove back plate. Use a transfer punch to mark the center of each hole.
- Drill two holes using an H drill bit and the punch marks as a guide.
- Mount back plate using the #10 screws and respective washers/nuts.
- Repeat this marking and drilling process for the other side.



8. Slide the front plates on the mounting bar, replace the shims on top of the back plate, and set the transfer into position on the back plates. Tighten the two socket head screws at each mounting bracket to secure the system in place. **(Fig. 16)**.



9. Install as many of the remaining segment pairs on the bar as will fit, with 1 end segment at each end. **(Fig. 17)**.
   - When segment pairs are made up of two different size halves it will be necessary to match the end segment length with the correct corresponding center segment.

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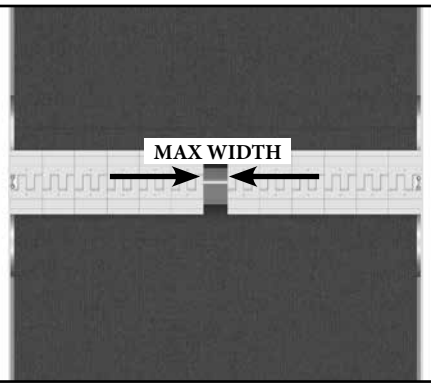
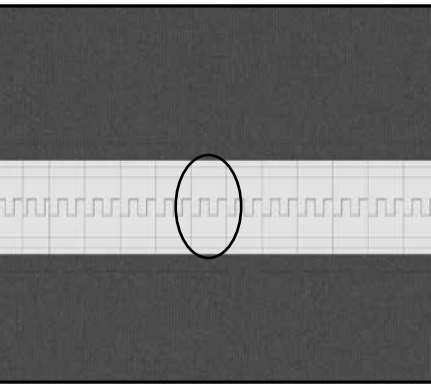
Fig. 18



10. From the center of the bar, push the segment pairs toward the ends of the bar ensuring that they are tightly butted against each other. Measure the gap that remains between the center most segments to determine the size of the final segment set. **(Fig. 18)**.

- If MAX WIDTH is greater than 1.5" (38 mm), use table saw to cut a final segment to 1/16"-1/8" (1.5-3 mm) less than MAX WIDTH.
- If MAX WIDTH is less than 1.5" (38 mm):
  a. Remove one additional segment adjacent to gap.
  b. Measure MAX WIDTH opening and divide by 2. (X / 2)
  c. Using table saw, cut two final segment pairs 1/16"-1/8" (1.5-3 mm) less than MAX WIDTH.
- **NOTE: Do not trim more than half 1-1/2" (38 mm) off a segment pair.**
- It is recommended to trim both segments of a segment pair while they are nested to ensure consistent segment widths.

Fig. 19

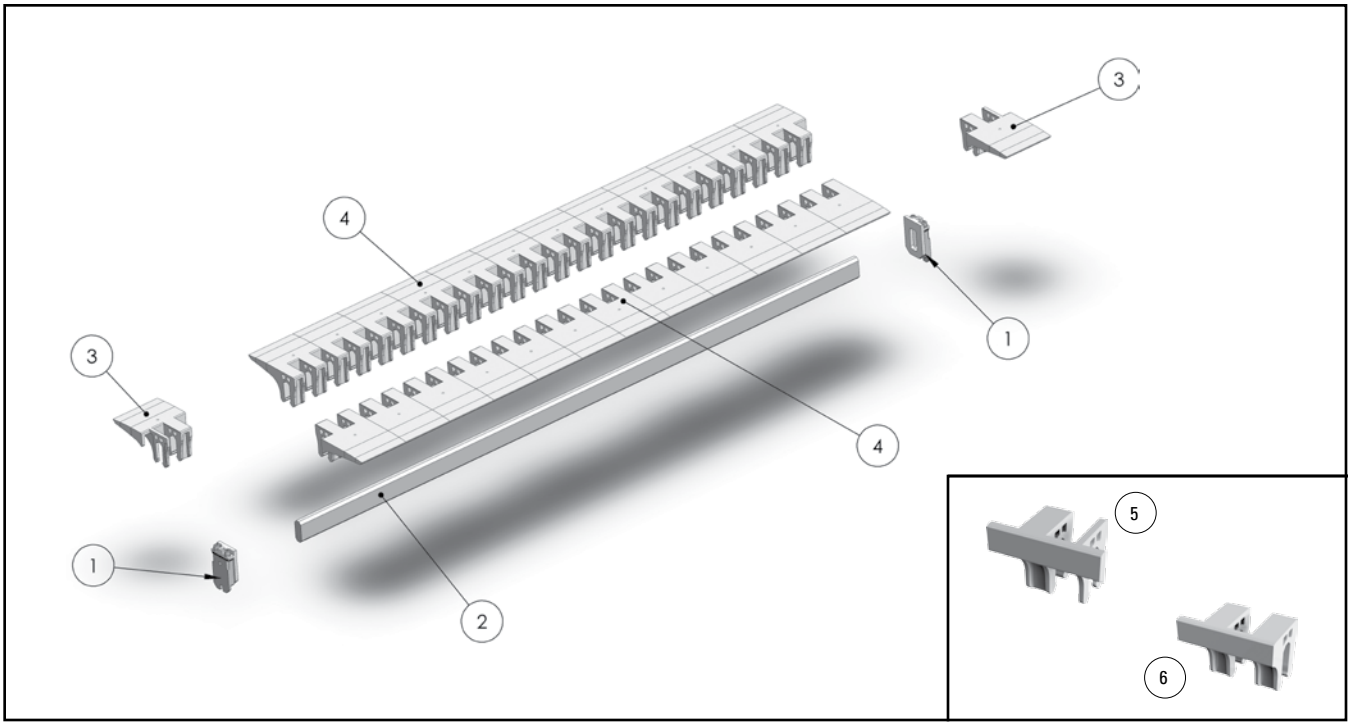


11. Install the last (trimmed) segments into the remaining gap **(Fig. 19).**

12. If support bar does not appear centered in the gap between pulleys, loosen the socket head screws and adjust the transfer. 1/8th inch (3 mm) total adjustment is available.

13. By adding or removing shims from the mounting brackets the transfer can be adjusted up or down a total of 1/16th inch (1.5 mm). This should allow adequate adjustment for crowned pulleys or belt with a profiled top cover.

14. Once all adjustments are made, secure the screws with a thread locking agent.



Item	Description	Item Code	Ordering Number
1	Mounting Bracket	56600	TG-MTG-BRKT RPL MNTG BRACKET
2	Support Bars	56601	TG-BAR-24/610 RPL BAR
		56602	TG-BAR-36/914 RPL BAR
		56618	TG-BAR-42/1067 RPL BAR
		56603	TG-BAR-48/1219 RPL BAR
		56604	TG-BAR-60/1524 RPL BAR
3	End Segments	56606	TGB-SEG-END-2 2 INCH END SEG
		56607	TGB-SEG-END-3 3 INCH END SEG
		56608	TGB-SEG-END-4 4 INCH END SEG
		56609	TGB-SEG-END-5 5 INCH END SEG
4	Center Segments	56611	TGB-SEG-CENTER-2 2 IN CTR SEG
		56612	TGB-SEG-CENTER-3 3 IN CTR SEG
		56613	TGB-SEG-CENTER-4 4 IN CTR SEG
		56614	TGB-SEG-CENTER-5 5 IN CTR SEG
5	Bridge End	56629	TGB-BRIDGE SEG-END
6	Bridge Center	56628	TGB-BRIDGE SEG-CENTER

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