## STP-HG-V4 Installation Instructions

## Parts Included in Transfer Plate Kit:

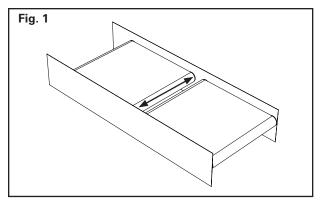
- Support Bar (1)
- Center Segment
- Right End Segment (2)
- Mounting Bracket Assemblies (2)
  - Outer Plate (2)
  - Inner Plate (2)
  - Shim Washers (16)
  - Socket Head Screws (4)

## Tools Required for Installation:

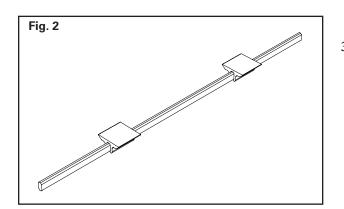
- Tape Measure
- 1/8" Allen Wrench
- Rubber Mallet
- Marking Pen/Soap Stone
- Hand Held Band Saw or Hack Saw
- Welder
- Welding Accessories
- Thread Locking Agent

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

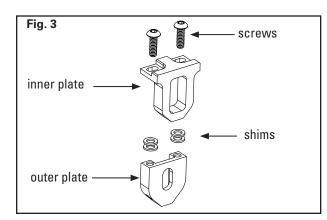




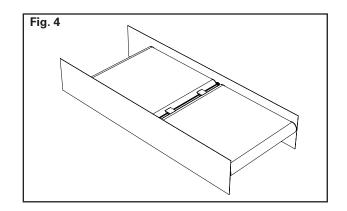
- Measure internal width of the structure at the desired installation location (Fig. 1).
  If structure is not available to attach mounting brackets, please add the necessary structure to allow for proper installation.
- 2. Cut the support bar 3/8" (9 mm) less than the measured internal width of the structure. Deburr/file any sharp edges.



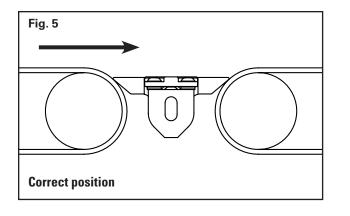
3. Slide one segment pair onto the bar from each end and position each approximately 1/4 of the total bar length from the end (Fig. 2).

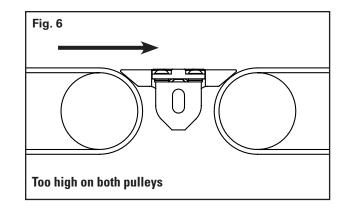


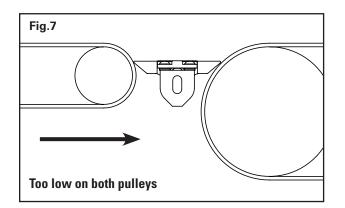
4. Place screws through slots on inner plate. Stack two shim washers on each screw. Using screws attach front plate to the back plate ensuring that the shim washers are in place. Align the edges of the front and back plates so that the vertical edges are parallel. Tighten screws. (Fig. 3).



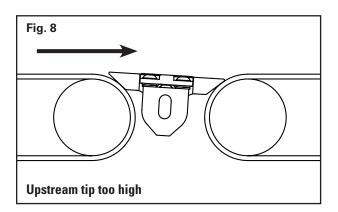
5. Slide one mounting bracket assembly onto each end of the bar. Position the support bar with segments and mounting brackets into the transfer gap. (Fig. 4).





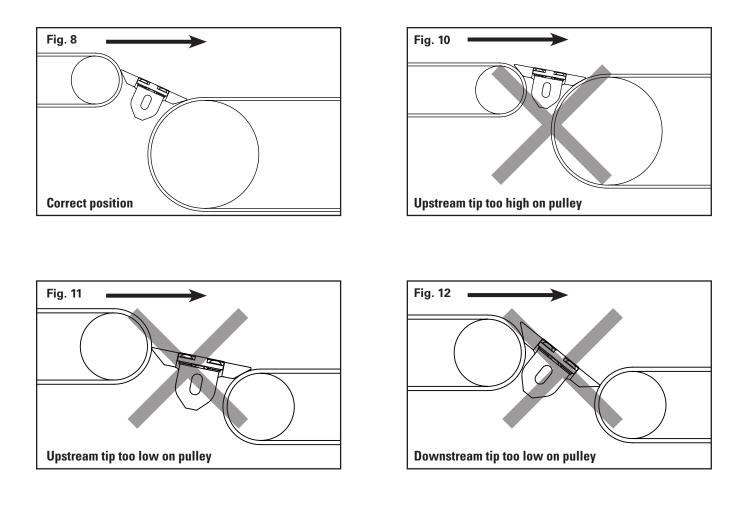


- 6. Horizontal positioning instructions:
  - Locate the point on the top of each pulley where the belt is tangent to the OD of the pulley (where the belt starts to wrap around the pulley). Position the support bar such that the narrow tip of each segment is the same distance below the tangent point on each pulley. This will position the surface of the segment parallel with the belt surfaces. (Figures 5, 6, 7).
  - When the bar is correctly positioned, the surface of the segment pairs should be approximately 1/2" (13 mm) below a line between the tangent points on the pulleys (Fig. 5, dimensions Y) and no more than 1/4 of the pulley diameter (i.e. 4" pulley = 1" maximum recommended drop).



• 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. 8**).

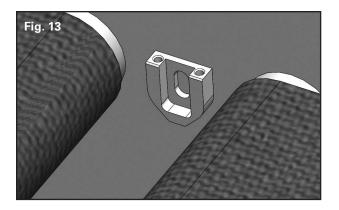




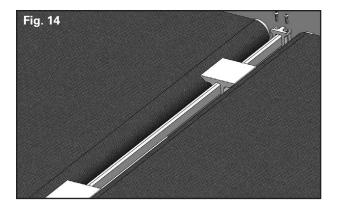
Staggered positioning instructions:

• 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 and no more than 1/4 of the pulley diameter (i.e. 4" pulley = 1" maximum recommended drop). 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 9, 10, 11, 12).

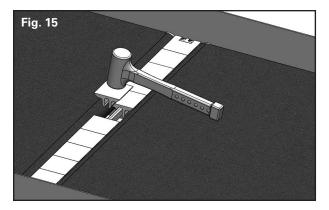
**Note:** For installations where one or both of the belts have a profiled top cover, such as Longitudinal Rib (LR), Mini Rough Top (MRT), or Rough Top (RT) belting, the transfer assembly should be positioned with a 0.012" clearance (thickness of a business card) between the surface of the profiled belt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



- 7. Welding instructions:
  - With the assembly in place, tack weld the outer plate onto the structure. NOTE: Weld bead must be at least 1/4" from the top of the outer plate, as a weld bead may interfere with end segment installation (Fig. 13).
  - 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 shim washers are removed with the assembly.
  - Finish welding the back plates to the structure.

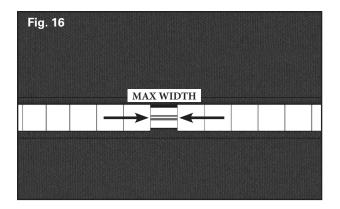


8. Slide the front plates on the mounting bar, replace the shim washers on the screws and set the bar/segment assembly into position on the mounted outer plates. Tighten the two socket head screws at each mounting bracket to secure the system is in place. (Fig. 14).

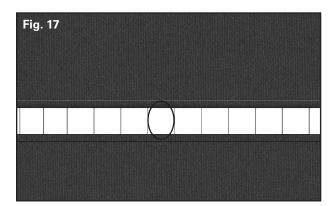


9. Install as many of the remaining segments on the bar as will fit, with 1 end segment at each end. (Fig. 15).

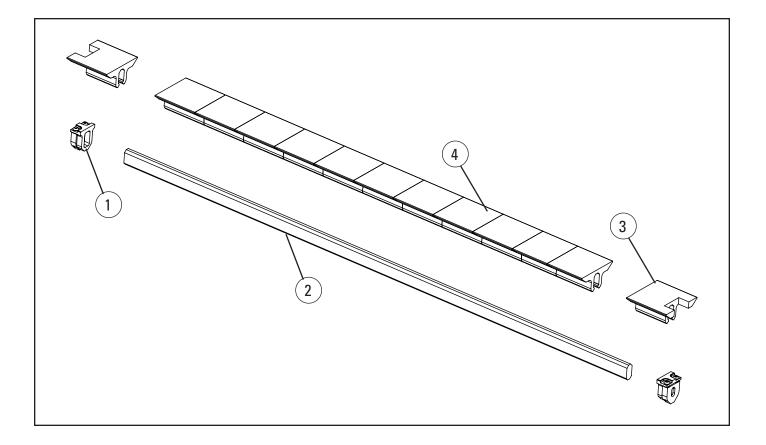




- **10.** From the center of the bar, push the segments toward the ends of the bar ensuring that they are tightly butted against each other. Measure the gap that remains between the center most segments to determine the size of the final segment set. (Fig. 16).
  - If MAX WIDTH is greater than 1.5" (38 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.



- 11. Install the last (trimmed) segments into the remaining gap (Fig. 17).
- **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.



ltem	Description	Item Code	Ordering Number
1	Mounting Bracket	56651	TGB-HG-V4-MOUNTING-KIT
2	Support Bars	04310	HITCHGD-V1-SUPPORT-BAR-62IN
3	End Segments	56652	TGB-HG-V4-END-SEGMENT
4	Center Segments	04269	HITCHGD-V1-CENTER-SEGMENT-3IN





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