

DURAHINGE®

Installing Your DuraHinge* Belt

Tools Required: Wire Ties, Wire Cutter, Pliers, Straight Edge, Safety Glasses

Caution: Improper installation can cause premature belt failure, damage to belt or conveyor, poor performance, or unnecessary downtime.

Safety Warning: Never attempt installation, repairs or maintenance on a moving conveyor belt. Always wear proper safety equipment during installation, repairs or maintenance. Keep clear of a moving conveyor belt at all times.

Before You Start: Turn off and lock out conveyor power source. Release tension on belt.

Remove Old Belt

- Use wire cutters to separate belt.
- Carefully pull old belt out of the conveyor, taking care to avoid belt hang-ups on conveyor components and any sharp wires that might be present.

Inspect Belt Path

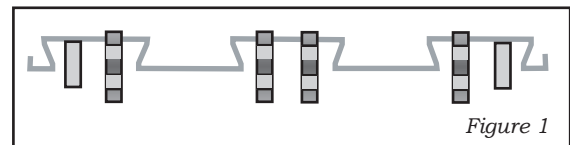
- Belt path should be clean and free of debris that may damage your new belt.
- Shafts should have no deflection and should be free turning (bearings should be lubricated and operating properly).
- Belt supports should be in good condition. Replace supports that have excessive wear.
- Check conveyor alignment to ensure it's square and level.

Evaluate Sprockets and Blanks

- Check sprockets. Replace if worn or damaged.
- To ensure even drive tension, blank and

sprocket keyways are strongly suggested.

- Sprockets should ONLY be placed in odd numbered openings. Sprocket placement in odd and even openings will cause uneven drive tension, belt damage and premature belt failure.
- Use a small piece of NEW belt as a template for sprocket and blank positioning.
- Beginning with the drive shaft, position a blank AND a sprocket in the first and last belt openings (you can start with either the right or left side). In these openings, place the blank close to but not touching the compound joint adjacent to the outside edge loop. Next, place a sprocket in the same opening near the compound joint on the other side of the opening (Figure 1).
- Position a pair of sprockets in ALL other odd numbered openings. Use the same spacing as describe in above step.
- When all sprockets and blanks are properly positioned, tighten setscrews.



Repeat this process for all shafts using sprockets or blanks.

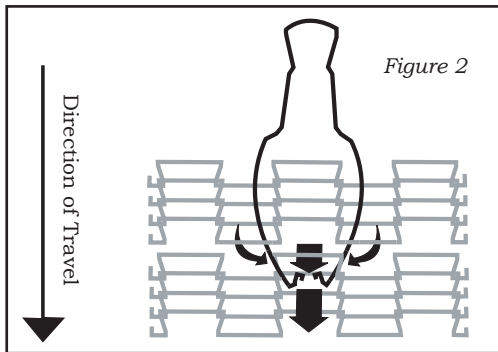
Install Your New Belt

- BEFORE threading the new belt onto the conveyor, make sure that the ridges that run the length of your belt are in a "down" position. It is also important that edge loops curve back away from the belt direction of travel (Figure 2). Correct belt orientation is

*U.S. Patent Pending

critical.

- Thread your new belt onto the conveyor and around all blanks and sprockets. Be sure to pull the belt along the center of the conveyor



to avoid snagging the edges. Confirm that edge loops curve back away from the belt direction of travel. If not, remove belting from conveyor and rethread to assure that edge loops curve back away from belt direction of travel.

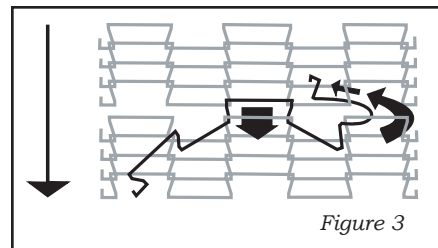
- Confirm proper sprocket spacing. If belt joints are touching sprockets or blanks, reposition them before proceeding.
- Pull the two belt ends together at an open, easily accessible section of the conveyor and tie together with wire ties.

Splice Your New Belt

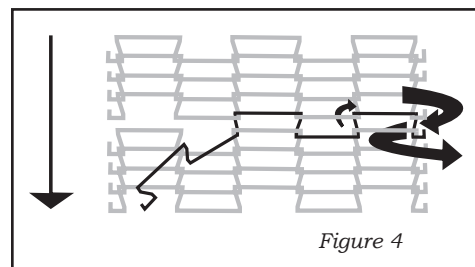
- Remove a strand from one end of your new belt to use for splicing. Match the strand's ridge orientation to the rest of the belt and be sure that the splicing strand edge loop is going in the same direction as belt edge loops.
- Working from the center of the belt, bend the splicing strand from each side and insert ends into two openings, one on each side of the center opening. Next, insert splicing strand ends into the center opening of the opposite edge (Figure 2).
- Pull both ends of the splicing strand through the opening (towards you) until the splicing strand "locks" into place. If needed, use pliers to straighten the strand within the center space. Remove wire ties.
- Working on either the right or left side, lace

one end of the strand and insert is around the compound joint (Figure 3).

- Bend the strand back toward the centerline of the conveyor and insert it into the space next to the center space (Figure 4). If needed, use pliers to straighten the strand within this opening.



- Repeat process until reaching the belt edge.
- Using pliers, connect the outside edge loops together.
- Repeat above steps, weaving the splicing



strand to the opposite side of the belt.

Run Your Conveyor

- Apply tension to your belt to remove excessive sag - just enough for the belt to run smoothly. DO NOT over tension your belt. Over tensioning reduces belt life.
- Recheck sprocket, blank, and support alignment. The compound joints should not touch any of these items.
- After assuring that the conveyor is free of tools and obstructions, your conveyor is ready to run.