

# Alligator® Spiral Lace Installation Instructions



## 3 Basic Installation Methods:

### Finger Splice method

Offers high strength, ability to operate over small pulleys, but most involved installation method.

### Ply Separation method

Easiest method of installation, but requires larger pulley diameters due to added thickness and stiffening at the splice.

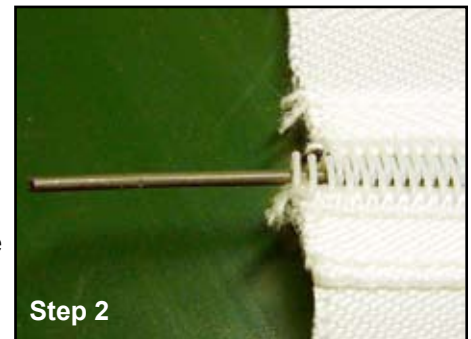
### Ply Step method

Ability to work over small pulleys, less involved installation procedures than the Finger Splice method.

## Ply Separation Installation Instructions:

**Step 1.** Cut Spiral Lace approximately 2" (50 mm) wider than the desired finished belt width. This excess width will be trimmed off after the fabrication process is complete.

**Step 2.** Mesh the two ends of the Alligator Spiral Lace together and insert a metal gauge pin that is slightly larger than the finished connecting pin into Spiral Lace. This will ensure that the loops of the fastener do not get crushed during the vulcanization process, allowing for the finished connecting pin to be inserted when the splice is complete.



**Step 3.** With a short hair brush, apply a thin coat of adhesive enhancer (PVC or PU) onto all sides of webbing. Allow enhancer to dry.

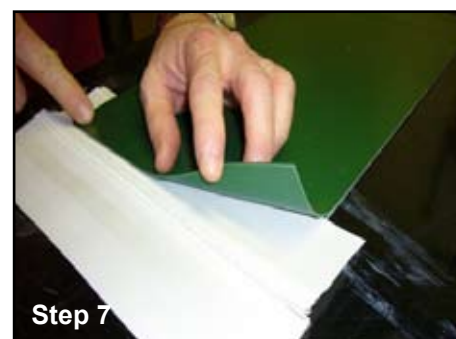


**Step 4.** Cut belt to finished length, less 3/8" (9.5 mm) for ASL60 or less 1/2" (12.5 mm) for ASL90.

**Step 5.** Ply separate ends of the belt. Note the depth of the ply separation.



**Step 6.** Cut down excess webbing width to fit in ply separated belt end, if applicable.



**Step 7.** Insert prepared webbing into the split belt ends, lining up belt edge just behind spirals.



**Step 8.** Using a heat gun, heat tack the webbing across the width of the belt.



**Step 9.** Lay prepared Spiral Lace/belt onto silicone pad in vulcanizing press. Cover with another silicone pad.

**Step 10.** Close press. Heat splice to temperature and pressure recommended by belt manufacturer.

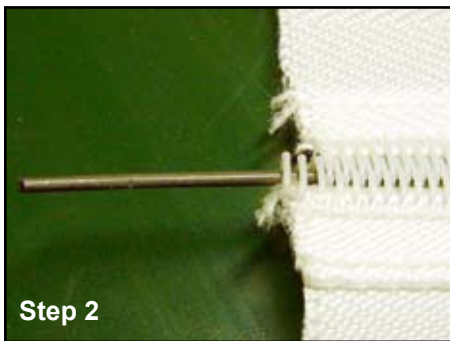
**Step 11.** After splice has cooled, open press and remove splice.

**Step 12.** Remove metal pin. Trim excess width of the Spiral Lace off. Insert standard pin and notch the trailing end corners if desired.

**Step 13.** Heating the connecting pin ends with a lighter will allow the pin material to melt on the end. Distorting the end and causing a bulge will help keep the pin from migrating out of the splice.



## Ply Step Installation Instructions:



**Step 1.** Cut Spiral Lace approximately 2" (50 mm) wider than the desired finished belt width. This excess width will be trimmed off after the fabrication process is complete.

**Step 2.** Mesh the two ends of the Alligator Spiral Lace together and insert a metal gauge pin that is slightly larger than the finished connecting pin into Spiral Lace. This will ensure that the loops of the fastener do not get crushed during the vulcanization process, allowing for the finished connecting pin to be inserted when the splice is complete.

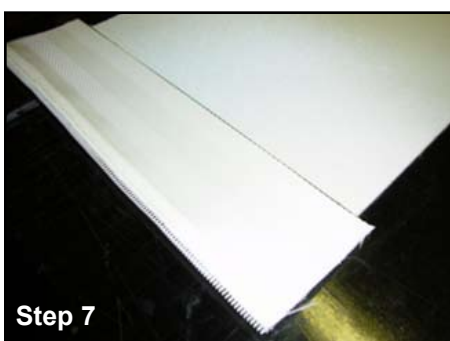
**Step 3.** With a short hair brush, apply a thin coat of adhesive enhancer (PVC or PU) onto the side of the webbing that will attach to the belt. Allow enhancer to dry. **Note:** The bottom side of the webbing will become the 'bottom ply' of the belting when complete.



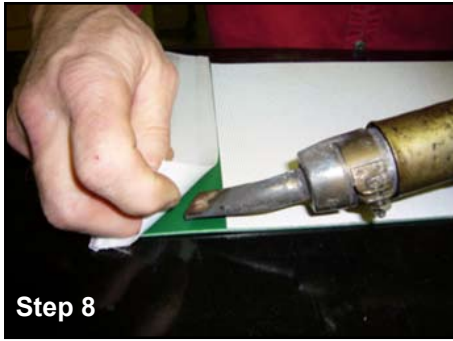
**Step 4.** Cut belt to finished length, less 3/8" (9.5 mm) for ASL60 or less 1/2" (12.5 mm) for ASL90.

**Step 5.** Measure the width of the webbing from the spiral to the edge of the belt. Using this measurement, ply separate the bottom ply of the belt across the width of the belt.

**Step 6.** Using a square and a knife, cut and remove the bottom ply using caution not to cut into the remaining plies of the belt.



**Step 7.** Lay belt on table with bottom side of belt facing up. Lay prepared webbing onto the belt with the prepared side (adhesive enhancer) facing down onto the belt.



**Step 8.** Using a heat gun, heat tack the webbing to the belt across the entire width.



**Step 9.** Lay prepared Spiral Lace/belt onto silicone pad in vulcanizing press. Cover with another silicone pad.

**Step 10.** Close press. Heat splice to temperature and pressure recommended by belt manufacturer.

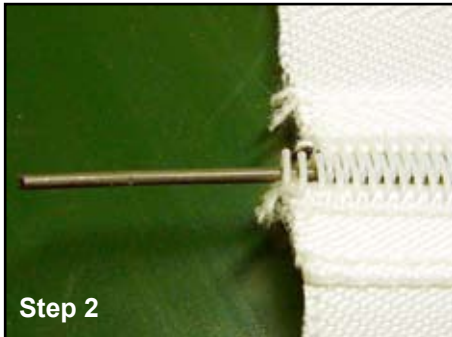
**Step 11.** After splice has cooled, open press and remove splice.



**Step 12.** Remove metal pin. Trim excess width of the Spiral Lace off. Insert standard pin and notch the trailing end corners if desired.

**Step 13.** Heating the connecting pin ends with a lighter will allow the pin material to melt on the end. Distorting the end and causing a bulge will help keep the pin from migrating out of the splice.

## Finger Splice Installation Instructions:



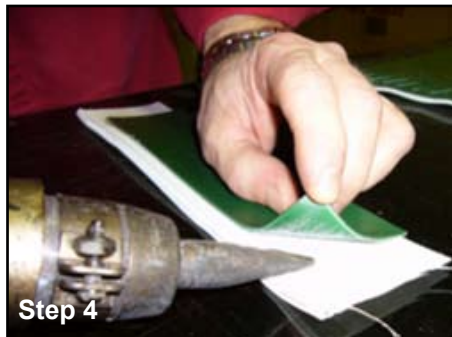
**Step 1.** Cut Spiral Lace approximately 2" (50 mm) wider than the desired finished belt width. This excess width will be trimmed off after the fabrication process is complete.

**Step 2.** Mesh the two ends of the Alligator Spiral Lace together and insert a metal gauge pin that is slightly larger than the finished connecting pin into Spiral Lace. This will ensure that the loops of the fastener do not get crushed during the vulcanization process, allowing for the finished connecting pin to be inserted when the splice is complete.



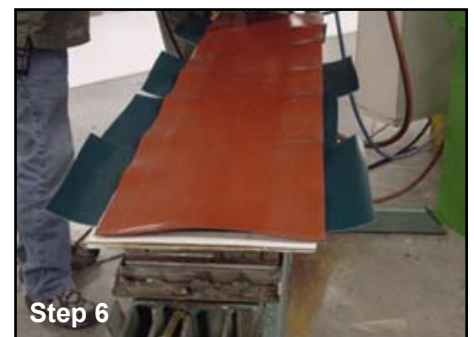
**Step 3.** With a short hair brush, apply a thin coat of adhesive enhancer (PVC or PU) onto all sides of webbing. Allow enhancer to dry.

**Step 4.** Insert foils between webbing layers, if using a double webbed Alligator Spiral Lace product. Heat tack foil between layers.



**Step 5.** Heat tack foils on top and bottom sides of webbing. Continue until thickness of prepared webbing is slightly less than the finished belt thickness.

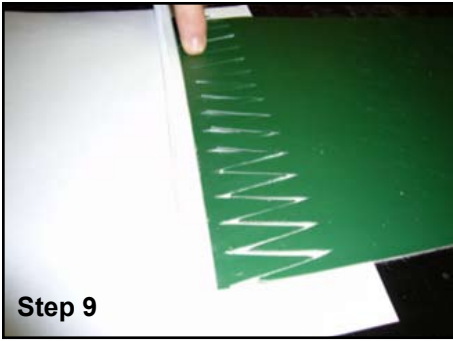
**Note:** If installing splice in a thicker belt you may want to use the double webbed product as it will require fewer layers of foil.



**Step 6.** Lay prepared Spiral Lace/belt onto silicone pad in vulcanizing press. Cover with another silicone pad.

**Step 7.** Close press and cook at a slightly lower temperature and pressure than recommended by belt manufacturer.

**Step 8.** Cool and remove prepared webbing from vulcanizing press.



**Step 9**

**Step 9.** Punch fingers into prepared Spiral Lace and also both belt ends.  
**Step 10.** Mesh prepared spiral lace and belt ends together.



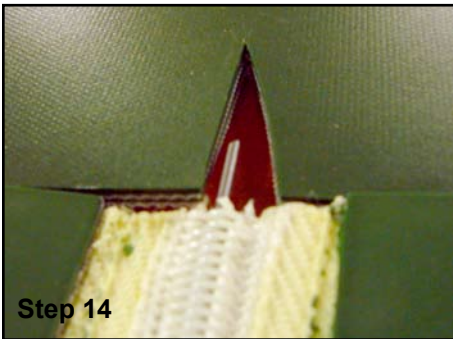
**Step 11**

**Step 11.** Heat tack fingers of belt and webbing together at multiple points across the belt width.



**Step 13**

**Step 13.** Lay an additional layer of foil over both belt ends, covering the finger splice. Heat tack in place.



**Step 14**

**Step 14.** Place prepared belt in press. Put scrap pieces of belt on both belt edges at the splice area, notching a slot for the metal pin to extend through.

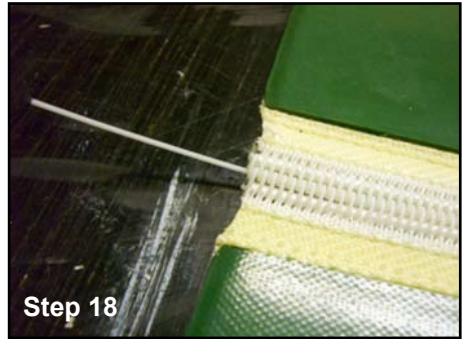
**Step 15.** Heat to pressure and temperature as recommended by belt manufacturer.

**Step 16.** Cool and remove belt from press.



**Step 17**

**Step 17.** Trim off excess scrap belt on both sides.



**Step 18**

**Step 18.** Remove metal pin. Trim scrap belt from edges. Insert standard pin and notch the trailing end corners if desired.

**Step 19.** Heating the connecting pin ends with a lighter will allow the pin material to melt on the end. By distorting the end and causing a bulge, it will help keep the pin from migrating out of the splice.