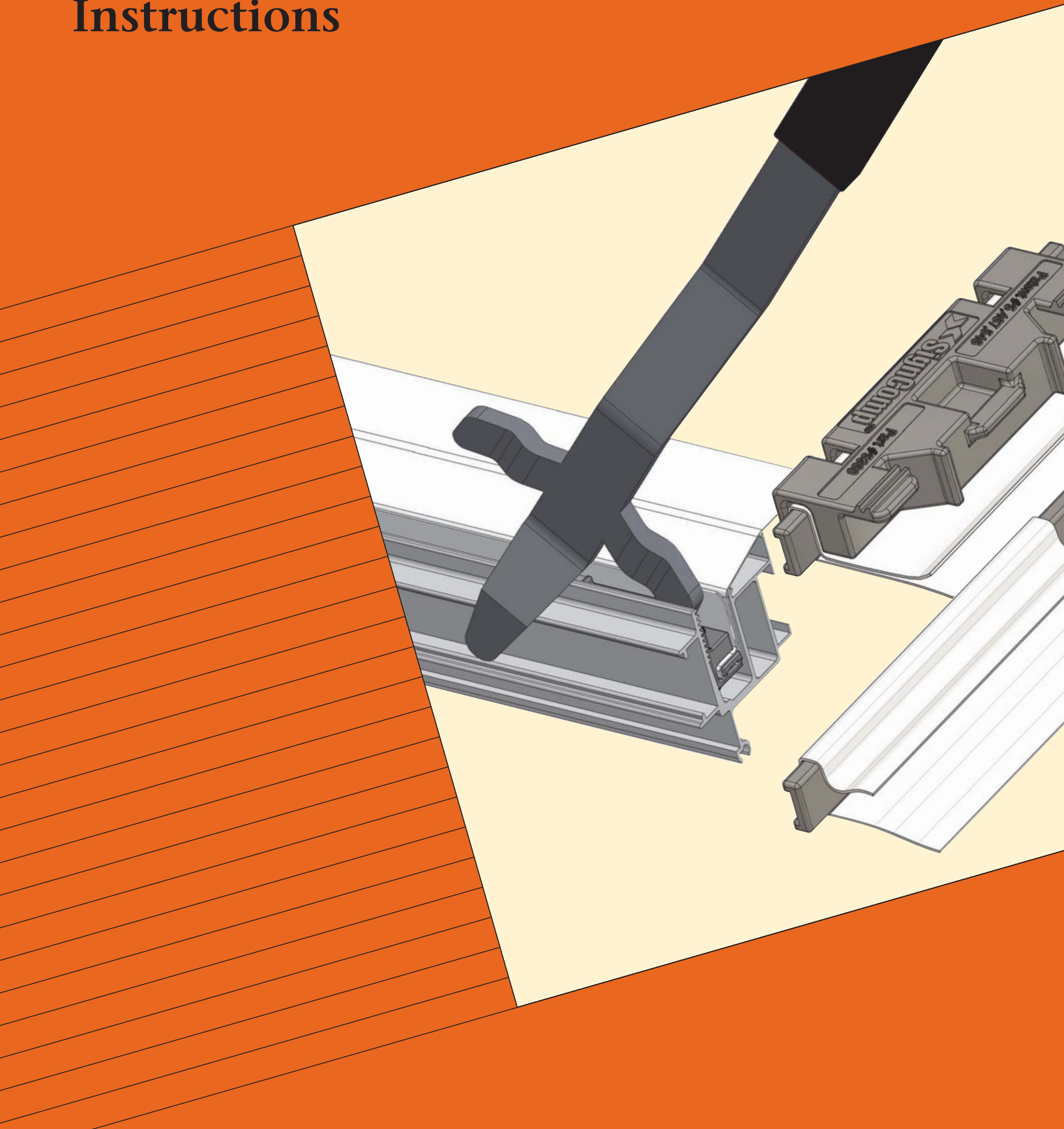# SignComp™

Tensioning
Instructions

SignComp™

Tensioning System Instructions

Before beginning, thoroughly read all tensioning instructions.

Tools Required:

1. SignComp Tensioning Tool, part #5135 or the #5137 or #5138 for the Wall Mount Tension.
2. Pen or marker.
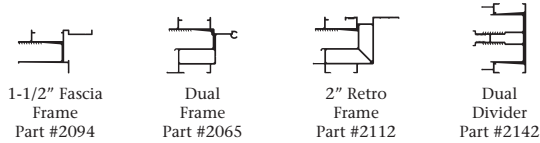3. Razor blade or utility knife.
4. Standard slotted screw driver.

NOTE: The SignComp tensioning system is suitable for use in dry, dry and damp or wet locations. Frames greater that 6 feet need to be braced to prevent billowing. Contact a local engineer for placement and quantity. SignComp tensioning system is not acceptable where an electrical enclosure is required.

1 Flexible Sign Fabric Requirements
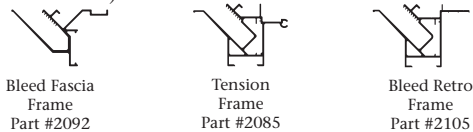
STRAIGHT
TENSION CHANNEL FRAMES

To the outside dimensions of any assembled **STRAIGHT TENSION CHANNEL FRAME**, add 1-1/2" of flexible fabric to all four sides. (Add a total of 3" of fabric to both the height and width dimensions of the assembled frame.)

NOTE: Measure from the center of the Dual Divider.

1-1/2" Fascia Frame Part #2094   Dual Frame Part #2065   2" Retro Frame Part #2112   Dual Divider Part #2142
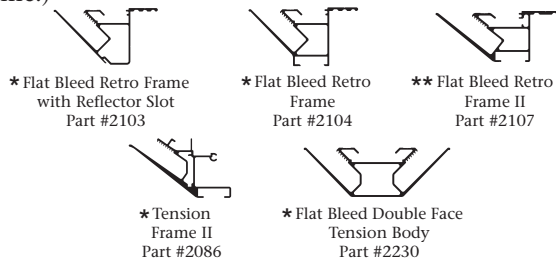
ANGLED
TENSION CHANNEL FRAMES

To the outside dimensions of any assembled **ANGLED TENSION CHANNEL FRAME BELOW**, add 3" of flexible fabric to all four sides. (Add a total of 6" of fabric to both the height and width dimensions of the assembled frame.)

Bleed Fascia Frame Part #2092   Tension Frame Part #2085   Bleed Retro Frame Part #2105

*To the outside dimensions of the identified assembled **ANGLED TENSION CHANNEL FRAME BELOW**, add 3-1/4" of flexible fabric to all four sides. (Add a total of 6-1/2" of fabric to both the height and width dimensions of the assembled frame.)
**Add 3-1/2" of flexible fabric to all four sides of the Flat Bleed Retro Frame II. (Add a total of 7" of fabric to both the height and width dimensions of the assembled frame.)

* Flat Bleed Retro Frame with Reflector Slot Part #2103   ***** Flat Bleed Retro Frame Part #2104   ****** Flat Bleed Retro Frame II Part #2107

* Tension Frame II Part #2086   ***** Flat Bleed Double Face Tension Body Part #2230

VERTICAL
TENSION CHANNEL FRAME

Wall Mount Tension Frame Part #2090

To the outside dimensions of the assembled **WALL MOUNT TENSION FRAME**, add 2-1/4" of flexible fabric to all four sides. (Add a total of 4-1/2" of fabric to both the height and width dimensions of the assembled frame.)

2 Tension Clip Requirements

To determine the approximate number of Tension Clips required, measure the outside dimensions of the assembled sign frame. You will require a *minimum* of two (2) Tension Clips for every perimeter foot. Use 6" on center for **straight** tension channel frames and 5" on center for **angled** and **vertical** tension channel frames and the Dual Divider.

12'

6'   Example Sign Size   6'

12'
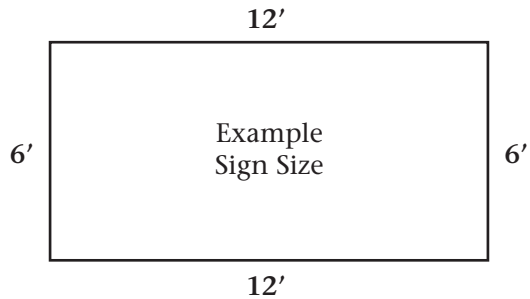
Outside dimensions = 36' (perimeter feet) x 12" = 432". 432" / 6" = 72 Tension Clips for **straight** tension channel frames. 432" / 5" = 87 Tension Clips for **angled** tension channel frames.

See page 5, **E. Tension Clip Placement** for further details.

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Tensioning System Instructions

3 Basic Instructions

A. Trim the flexible sign fabric to size.
The fabric is to be cut to the appropriate size. See page 1, **1. Flexible Sign Fabric Requirements.**

B. Establish the Tension Clip Placement Line.
IMPORTANT - <u>Address the fabric graphic side up.</u>
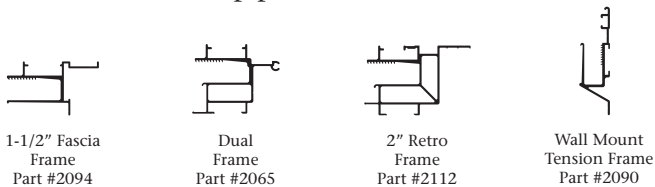The clip placement line is to be located on the graphic side of the fabric.

FOR ALL FRAMES:
Draw or drop the clip placement line 1-1/2" in from the edge of the **trimmed to size** fabric.
NOTE - Wall Mount Tension Frame (WMTF) (Part #2090), come in 2-1/4" from the edge of the **trimmed to size** fabric.

IMPORTANT - The **stretch factor** of the flexible fabric varies considerably for each brand. For large applications (10' x 10' or larger), it is advised to test the stretch factor before determining the clip placement line. See Page 7, **Important Note**.
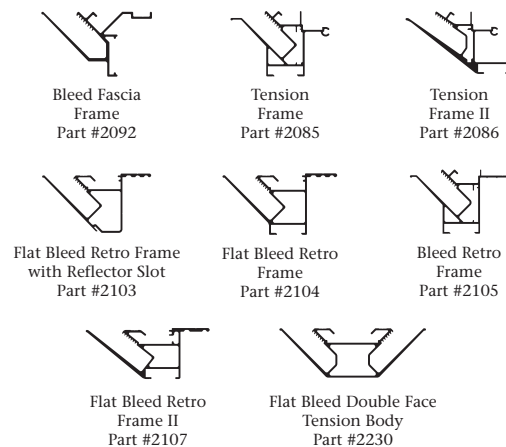
HINT: Straight Tension Channel Frames and **WMTF** may be placed on the fabric, centered over the graphic (1-1/2" from edges and 2-1/4" for WMTF) and traced along the outside perimeter of the frame to establish the clip placement line. (Illus. 1 & 2).

1-1/2" Fascia Frame Part #2094

Dual Frame Part #2065

2" Retro Frame Part #2112

Wall Mount Tension Frame Part #2090

Illus. 1

HINT: Angled Tension Channel Frames may be used as a straight edge to draw the clip placement line and trimmed to size fabric line.

IMPORTANT: Be sure to adjust the position of the angled tension channel frame to accommodate the additional fabric required. See Page 2, **1. Flexible Sign Fabric Requirements.**
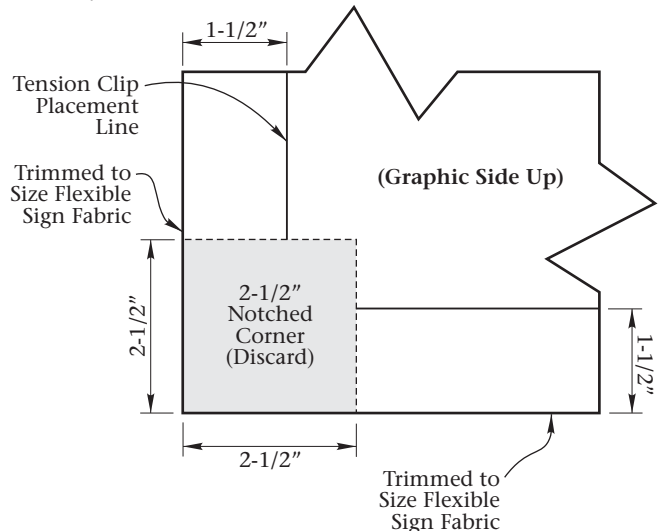
Bleed Fascia Frame Part #2092

Tension Frame Part #2085

Tension Frame II Part #2086

Flat Bleed Retro Frame with Reflector Slot Part #2103

Flat Bleed Retro Frame Part #2104

Bleed Retro Frame Part #2105

Flat Bleed Retro Frame II Part #2107

Flat Bleed Double Face Tension Body Part #2230

C. Notch the Corners
Cut away an approximate 2-1/2" square notch from the fabric edge in each of the four corners of the **trimmed to size** fabric.

IMPORTANT - It can be an advantage NOT to cut away a notch from each corner for the Bleed Frames and the Wall Mount Tension Frame.

HINT:

1-1/2"

Tension Clip Placement Line

Trimmed to Size Flexible Sign Fabric

(Graphic Side Up)

2-1/2"

2-1/2" Notched Corner (Discard)

2-1/2"

1-1/2"

Trimmed to Size Flexible Sign Fabric

Illus. 2

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# Tensioning System Instructions

D. Tension Clip Attachment

IMPORTANT - Tension Clips are attached to the fabric graphic side up.

NOTE - The Tension Clip is comprised of two components: The **Tension Clip Body** and the **Tension Clip Mandrel.** (Illus. 3)
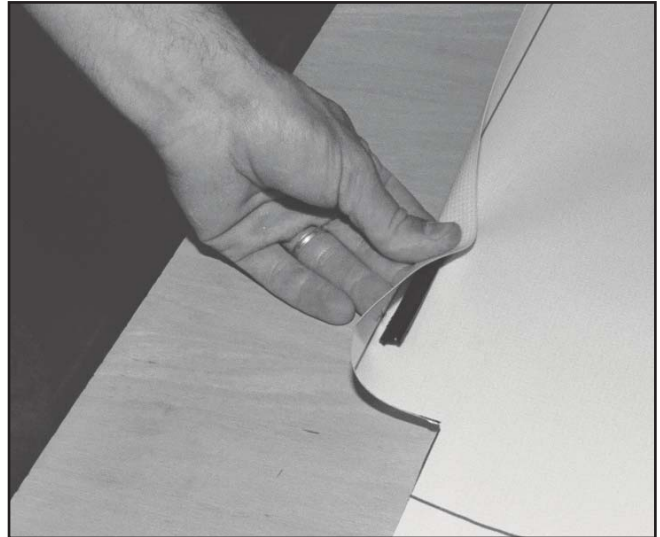
Tension Clip Body

Tension Clip Mandrel
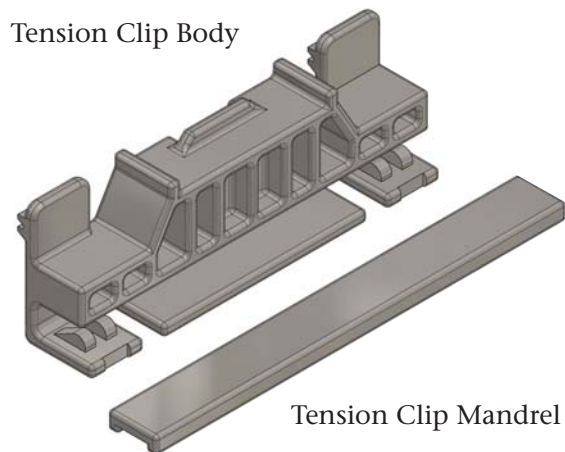
Illus. 3

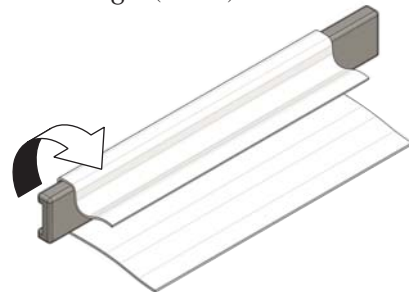**1.)** Place the mandrel, smooth side up, on the fabric just inside the clip placement line. (Illus. 3.)
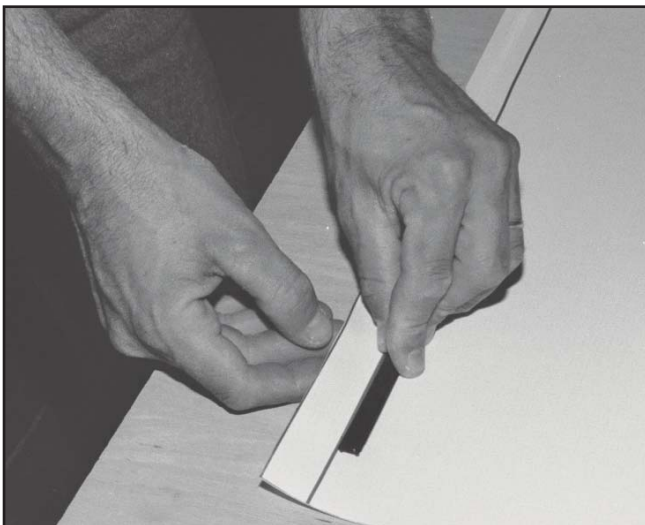
Illus. 4

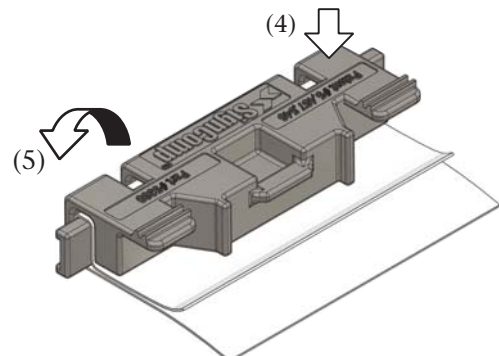**2.)** Fold the fabric over the mandrel. (Illus. 5)

Illus. 5

3.) Rotate the fabric and mandrel forward by lifting the edge nearest you to stand the mandrel and fabric up on its edge. (Illus. 6)

Illus. 6

4.) With the SignComp logo facing toward you, use thumb pressure to drive one end of the clip body down on to the mandrel and fabric. (Illus. 7 & 8)

(4)

(5)

Illus. 7

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SignComp™

Tensioning System Instructions

5.) Using palm pressure, drive the remaining end of the clip body down onto the mandrel and fabric. (Illus. 7, 8, & 9.)
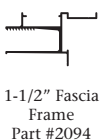
Illus. 8

Illus. 9

HINT: Do not try to drive both ends of the clip body down onto the mandrel and fabric at the same time. Snap one end down then the other end.

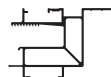## E. Tension Clip Placement (Illus. 10)

The following Frames have a clip placement of approximately 6" on center.

1-1/2" Fascia
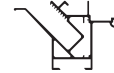Frame
Part #2094

Dual
Frame
Part #2065

2" Retro
Frame
Part #2112

The following Frames have a clip placement of approximately 5" on center.

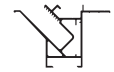Bleed Fascia
Frame
Part #2092

Tension
Frame
Part #2085

Tension
Frame II
Part #2086

Flat Bleed Retro Frame
with Reflector Slot
Part #2103

Flat Bleed Retro
Frame
Part #2104

Bleed Retro
Frame
Part #2105

Flat Bleed Retro
Frame II
Part #2107

Flat Bleed Double Face
Tension Body
Part #2230

Wall Mount
Tension Frame
Part #2090

Dual
Divider
Part #2142

Illus. 10

HINT - Tension Clip Position may be adjusted with out removing the Tension Clip from the fabric. Slide the clip mandrel in the direction you wish to move the Tension Clip. Follow this by sliding the Tension Clip Body. Repeat this procedure until position adjustment is achieved.

HINT - The Tension Clip may be detached from the fabric by pulling the Tension Clip Body straight off and away from the fabric and Tension Clip Mandrel.

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Tensioning System Instructions

F. Tensioning

1.) Lay the assembled frame flat with the extruded Tension Channel facing up.

2.) Lay the fabric, with the Tension Clips attached, over the assembled frame graphic side up.

3.) Insert the Tension Clips into the Tension Channel of the assembled frame. Work your way around the frame just starting each clip into the extruded frame as shown. (Illus. 12 & 13.)

HINT: When pulling on the fabric do not pull directly on the fabric flap or Tension Clip doing so will cause the Tension Clip to pop off. When pulling on the face grasp the fold and pull the face into place.

4.) Using the Tension Tool, exert a downward force onto each Tension Clip, pressing it into the extruded frame as shown. (Illus. 12 & 13.)

HINT: Just start the Tension Clips in one or two clicks, working your way around the frame. Go back around a second time and apply tension by driving the Tension Clips down into the frame. **Do not over tension**. Apply just enough tension to achieve a smooth, flat appearance.

G. Tension Tool Use

Hook the Tension Tool tip under the outside rail of the assembled frame. Slide the Tension Tool along the outside rail. With gentle, consistent pressure, force the Tension Clip into place by pressing the "wings" of the Tension Tool downward onto any portion of the Tension Clip.

By pushing or pulling the Tension Tool handle while the Tension Tool tip is inserted under the outside rail, leverage is gained to exert force down on to the Tension Clip. (Illus 12 & 13.)
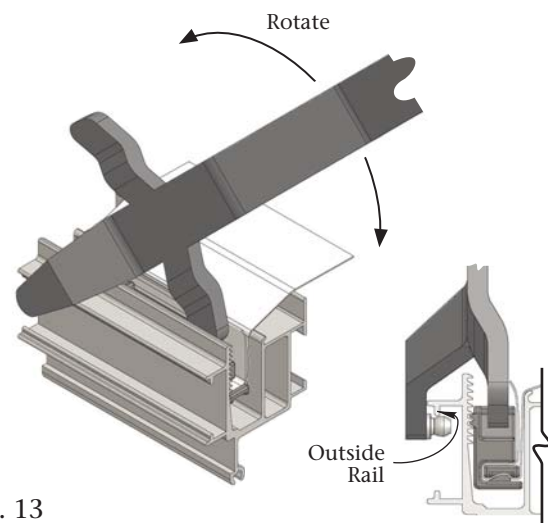
NOTE: Downward pressure may be applied to either end or the middle of the Tension Clip.

Illus. 11

Illus. 12

Illus. 13

Rotate

Outside Rail

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SignComp™

Tensioning System Instructions

## H. Releasing the Tension and Removing the Tension Clip

A standard slotted screwdriver is used to release tension from the installed fabric. Insert the tip of the screwdriver into the recess located at the backside of the Tension Clip. Rotate or tilt the screwdriver to separate the Tension Clip teeth away from the extruded teeth within the frame. This will release the tension or allow the Tension Clip to be removed from the frame by prying or pulling the Tension Clip up & out. (Illus. 14 &15.)
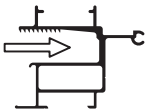

Illus. 14
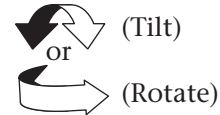
(Tilt)
or
(Rotate)

1.) Insert the screwdriver tip into the Tension Clip recess.

2.) Rotate or tilt the screwdriver to release the Tension Clip teeth away from the extruded frame.

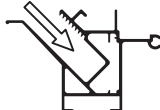3.) Remove Tension Clip by prying or pulling it out and up from the frame.
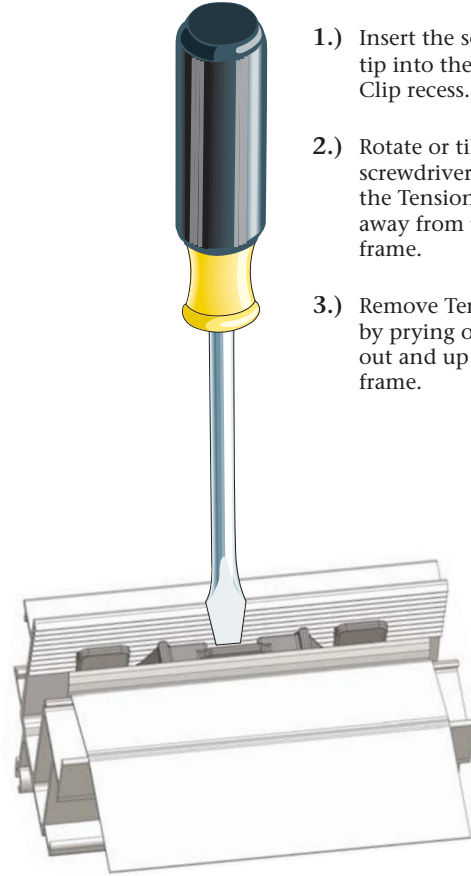
Illus. 15

I. References

STRAIGHT
TENSION CHANNEL FRAMES
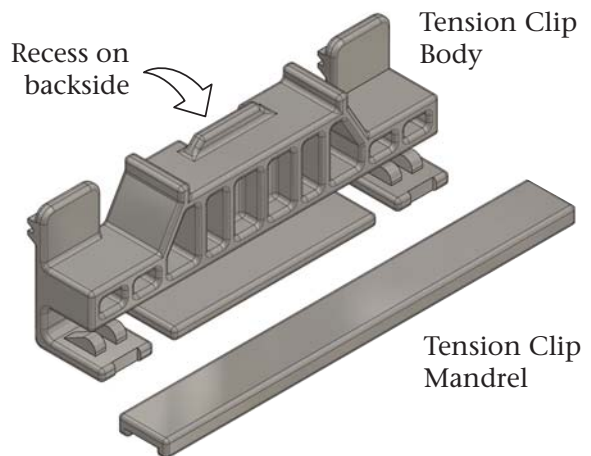
Dual Frame
Part #2065

ANGLED
TENSION CHANNEL FRAMES

Tension Frame
Part #2085

VERTICAL
TENSION CHANNEL FRAME

Wall Mount
Tension Frame
Part #2090

Recess on backside

Tension Clip Body

Tension Clip Mandrel

Important Note: It is important to note the stretch factor of the flexible fabric varies considerably for each brand. When tensioning large sign faces (10' x 10' or larger) it is advisable to test the stretch factor by using a strip of the same fabric with one tension clip on each end.

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SignComp™

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