Phillips Wave Canopy LED Repair Kit Instructions

These instructions explain how to use the kit below to replace damaged LED modules on Phillips Wave canopy lighting. Contact LSI Customer Service at 1-800-231-0129 for installation support.

Read through all of the instructions prior to beginning installation, and verify (using the packing list) that all parts have been received and are in good condition.
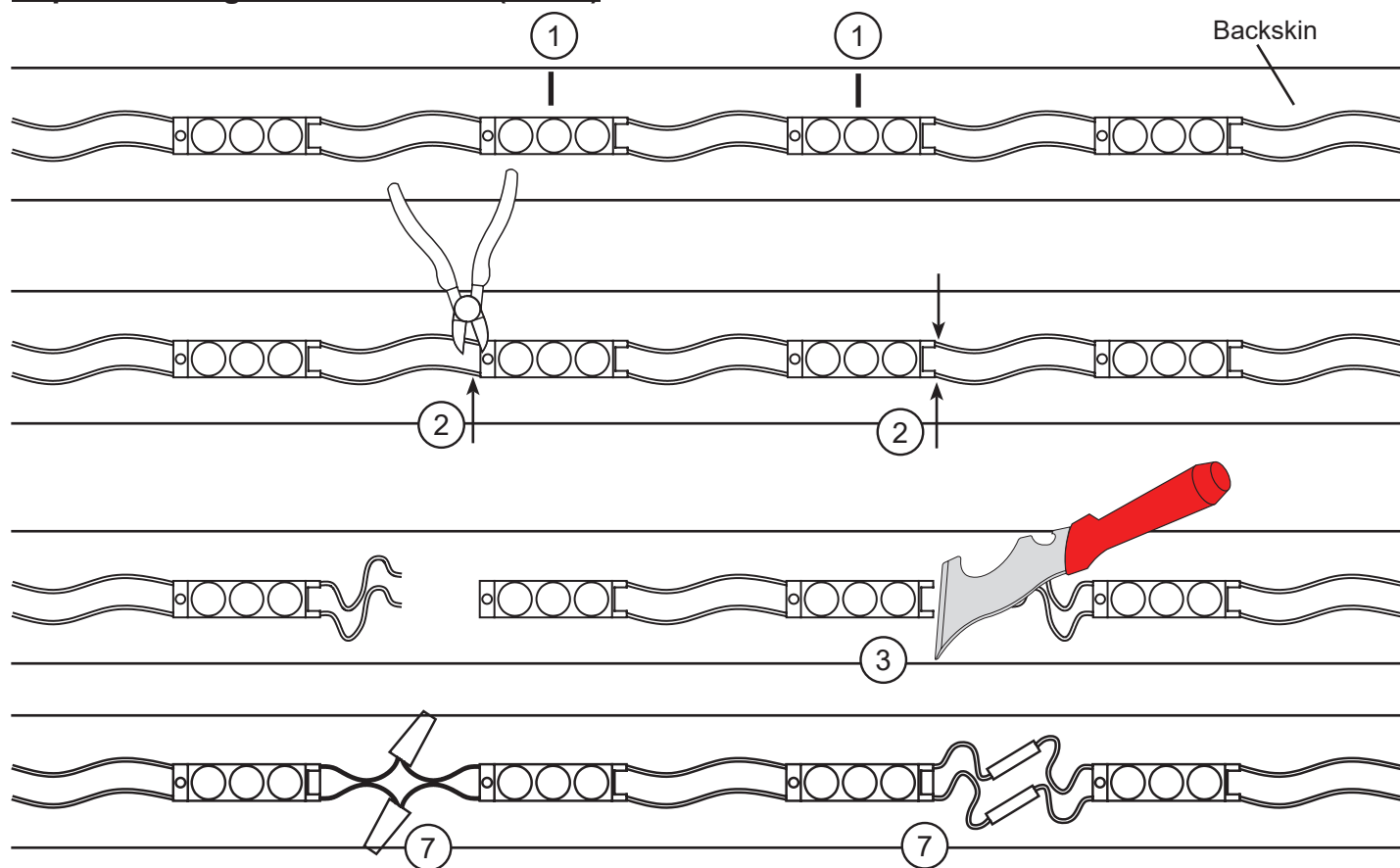
Parts

KIT TRIAGE WAVE, ORN LED/60W PS, PN 775823

KIT INCLUDES: (18) ORANGE LED MODS, (2) 60W POWER SUPPLIES)

STRING OF 18 LED MODS

Replace damaged LED modules (mods)


Backskin

1. Remove orange flex face covering from wave lighting element to be repaired (refer to instructions later in this guide). Mark center of damaged LED modules (mods) being removed.
2. Cut wires very close to damaged mods being removed.
3. Remove mod using screw driver, chisel or other tool. Wear eye protection throughout this mod replacement procedure.
4. Remove all remaining glue from mod channel in area being repaired.
5. Clean backskin using isopropyl alcohol (IPA)/water solution, wipe dry with low lint cloth and let air dry. First use mild detergent or soap solution if there is heavy dirt/grease, and wipe with low lint cloth that has been wetted with water.
6. Replace damaged mod(s).
7. Strip ends of mod wires, connect wires using crimp connectors, or twist wires together and cap with wire nuts. Do not leave crimp connectors or wire nuts where they will cast a shadow from LED light.
8. Test repaired section to check that mods light up correctly.

9. Peel off backing, stick mod(s) onto backskin. Place each mod at centerline marked earlier.
10. Apply Gorilla® Super Glue Gel (available at Lowe's, Home Depot, Walmart) or silicone if that is not available onto connectors, wires and edges of mods. This will help hold everything in place and help seal moisture out of connectors.
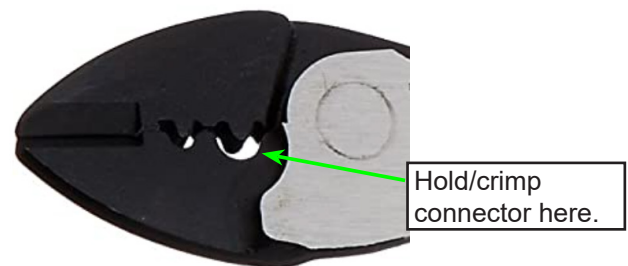11. Close wave lighting element again with orange flex face covering.
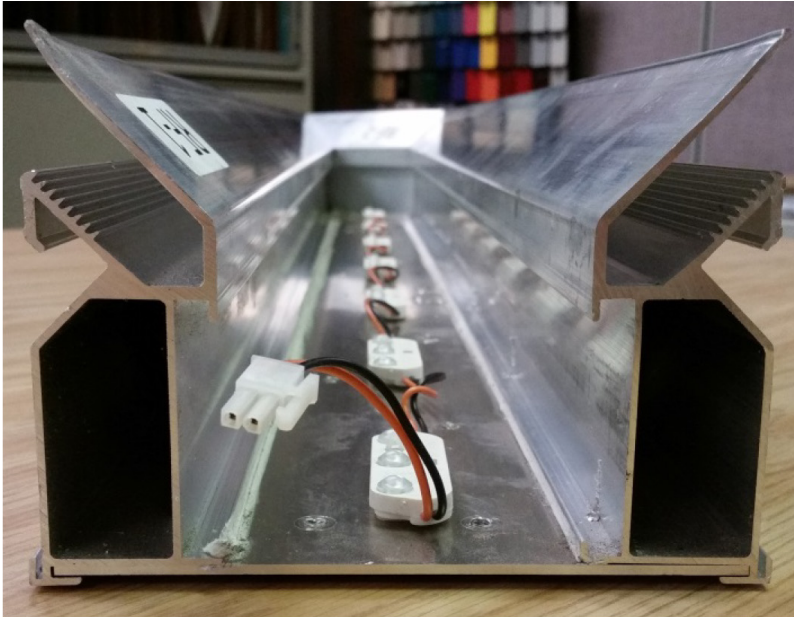
Use tool that is sharp enough to remove LED module(s), but not damage base material. Hammer can be used at end of handle, but not hard enough to cause damage.

Scraper

Screw driver

Painter's tool

Chisel
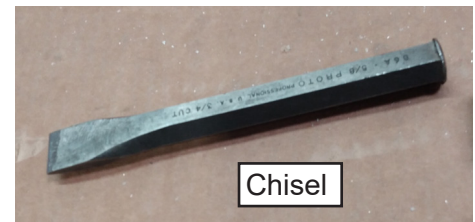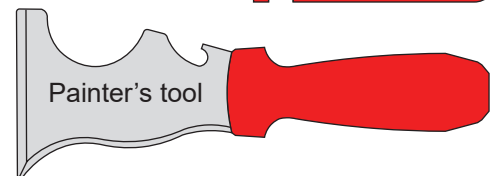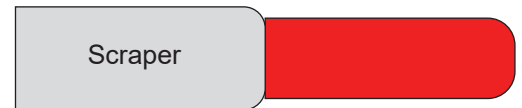
Place connector in electrical crimping pliers jaw.

Place connector over wire and crimp. Use electrical crimping pliers, because regular pliers may tear jacket and compromise water resistance of connector.

Hold/crimp connector here.

Following pages are reference for temporarily removing orange flex face to get access to LEDs.

Tensioning System Instructions

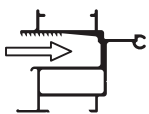### H. Releasing the Tension and Removing the Tension Clip

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.)
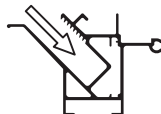

Illus. 14

(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

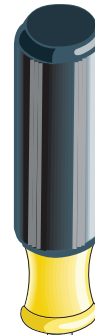Dual Frame
Part #2065

ANGLED
TENSION CHANNEL FRAMES

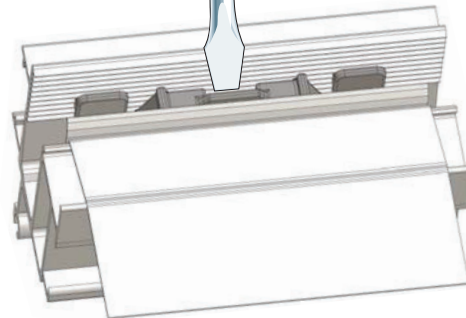Tension Frame
Part #2085

VERTICAL
TENSION CHANNEL FRAME

Wall Mount
Tension Frame
Part #2090

Recess on backside

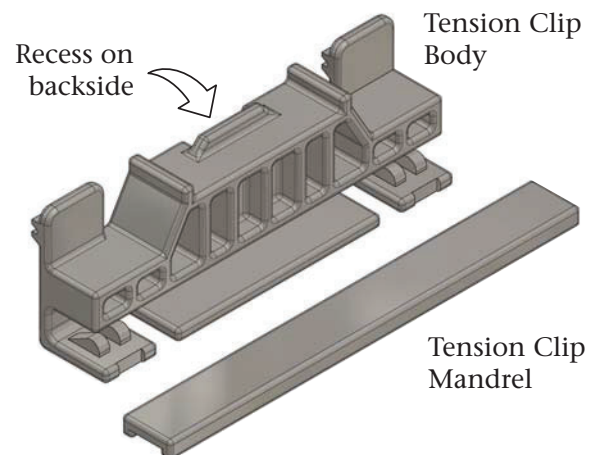Tension Clip Body

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.
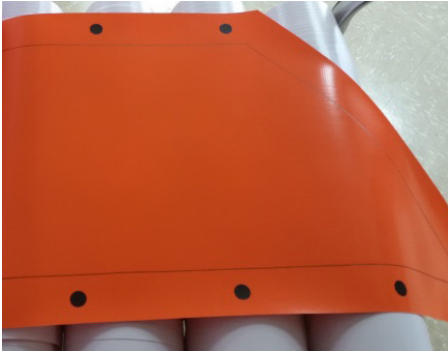
Installation of the Clips onto the Orange Flex Face

Clips will need to be installed on the orange flex face before installing on the wave back.

Faces will be marked with a line and dot system, to show designated clip placements on the face. Clips should be placed on center of the dots.
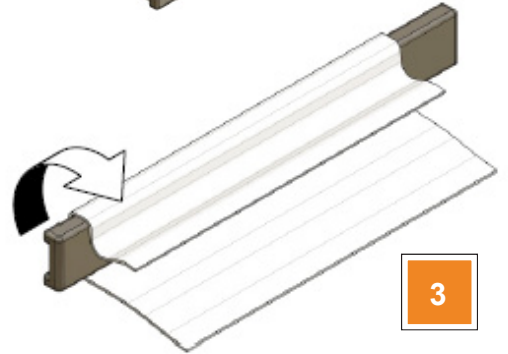
Installers will receive a bag with a designated number of clips per wave size.

Tension Clip Body

Tension Clip Mandrel

1
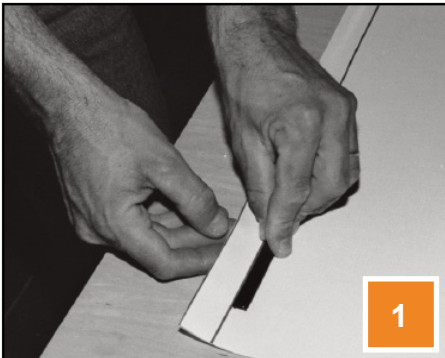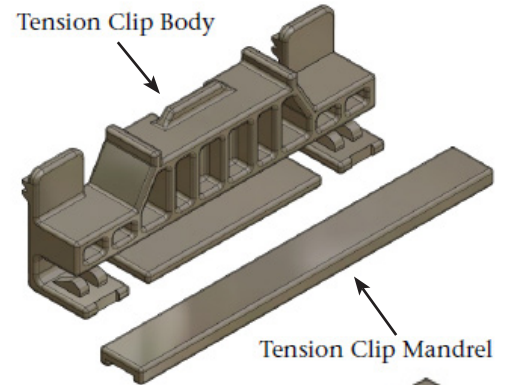
Place the mandrel, smooth side up, on the fabric just inside the clip placement line.

NOTE – Tension clips are attached to the fabric graphic side up.
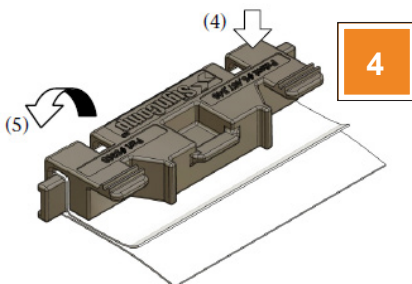

2

Fold the fabric over the mandrel.

3

Rotate the fabric and mandrel forward by lifting the edge nearest you to stand the mandrel and fabric up on its edge.

(4)

(5)

4

(Above) With the logo facing toward you, use thumb pressure to drive one end of the clip body down onto the mandrel and fabric.

5

6

Using palm pressure, drive the remaining end of the clip body down onto the mandrel and fabric.

NOTE – 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.

7

Tension clip position may be adjusted without 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.

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.

Installation of the Orange Flex Face

Tools

Tension Tool
Provided by LSI per CREW

Bar Clamp (x2)
Installer provided

C-Clamp (x4)
Installer provided

(Below) About 4-6' down, attach c-clamps on both sides of the flex face, and 1' further down attach c-clamps on both sides of the extrusion.

(Below) Attach bar clamp between the two c-clamps, both top and bottom, and then tighten the bar clamp until the face is wrinkle free. DO NOT OVERTIGHTEN THE FACE. Face should not have slack, but should not be tight.
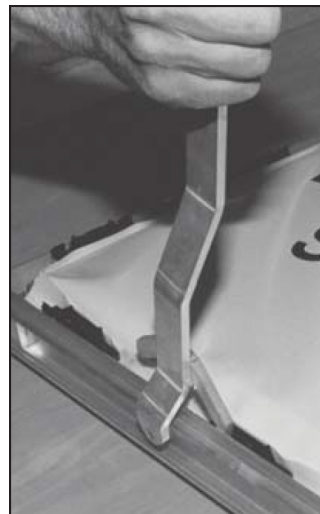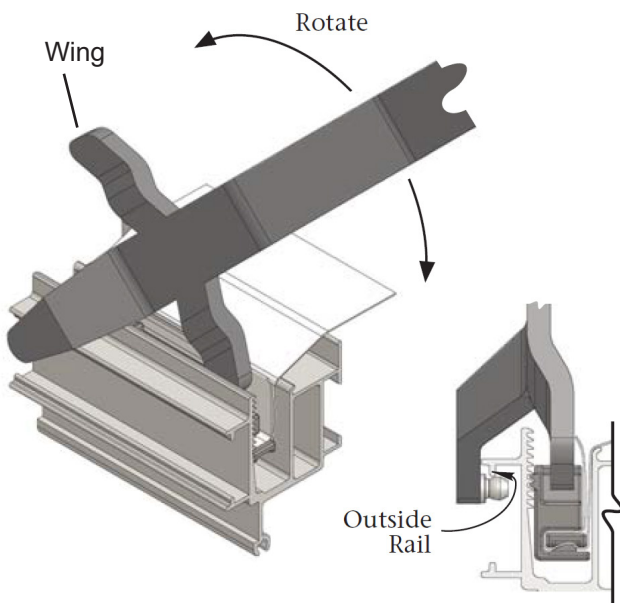
Snap the clips in by hand

Use the tension tool to finish tightening the face. Be sure to alternate between top and bottom sides to keep the face even and installed properly.

Rotate

Wing

Outside Rail

(Left) Images show operation of tension tool (frame shown is different than Wave, but illustrates use of tension tool).

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 onto the Tension Clip. Downward pressure may be applied to either end or the middle of the Tension Clip.
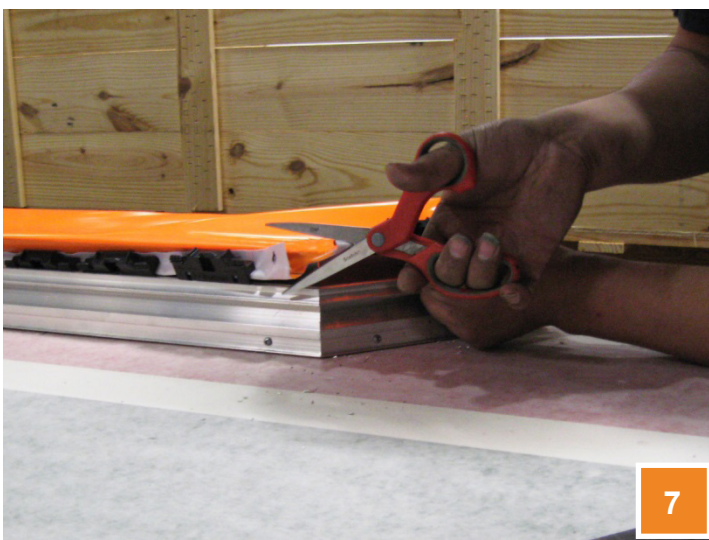
(Above) Continue moving along the face, repeating the above steps until reaching the end. If there is additional face after all tightening has been completed, clip the face carefully to trim it up.