# IP68 LED Neon Installation Tips

The unique form factor and high IP68 waterproof rating of Environmental Lights LED Neon make it a great product for a variety of applications. However, those same qualities mean that it requires specific installation procedures. For larger projects, Environmental Lights offers injection molded LED Neon that comes straight from the factory cut to specified lengths and is fully IP68 waterproof end-to-end. Injection molded LED Neon inherently avoids the potential issues discussed here and is a great option for projects requiring multiple reels. This guide will help avoid the most common mistakes encountered while installing stock LED Neon. Be sure to read the full instructions for RGB or Single Color LED Neon before beginning any installation.

1. Use waterproofing grease to help seal IP68 connectors.
    a. Waterproofing grease helps to fill in small gaps and uneven surfaces that result from cutting the LED Neon. A tube of this grease is included with each full reel of LED Neon and can also be found under LED Neon Accessories. Do not use waterproof silicon glue instead of grease with IP68 connectors.
    b. Apply waterproofing grease to the connector, metal bracket and the end of the LED Neon.
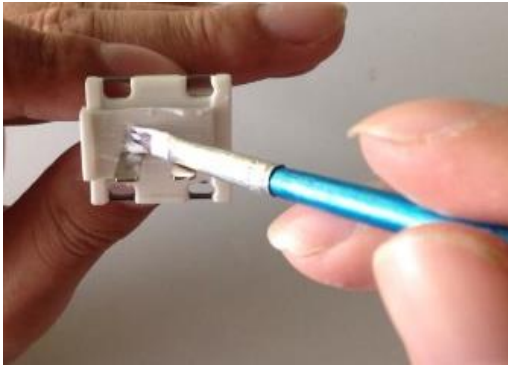
    c. Do not apply grease to the pins of the connector. The grease is insulating and can prevent contact between the pins and the LED Neon.

2. Use the correct gasket for the front connector (with pins) and end cap respectively.
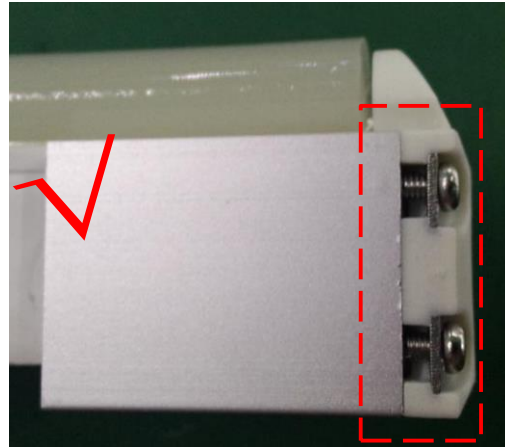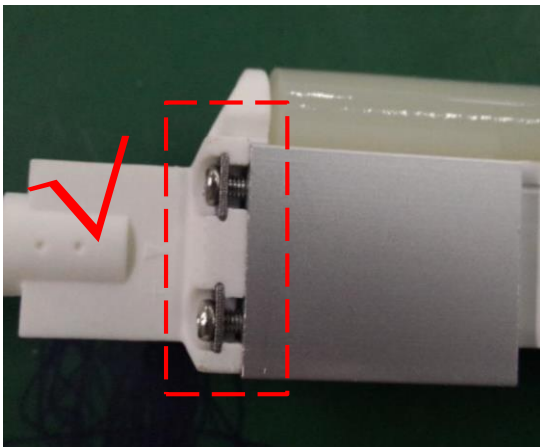

Front Gasket with Cutout

End Cap Gasket

3. Ensure that all screws are properly installed.
   a. Always install four screws in each end. Do not leave any screw holes open.

   b. Tighten screws evenly and fully so that there are no gaps between the connector and bracket. Do not overtighten, as this may skew the connector and allow moisture in.

4. Make sure that the bottom of the LED Neon is seated in the bracket.
   Check to make sure that the LED Neon tightly secured to the bottom of the metal
   bracket. Failure to do so may allow moisture in.

5. Insert connector pins on the back side of the PCB only.
   a. If the connector is inserted in the wrong orientation it can damage the LEDs.
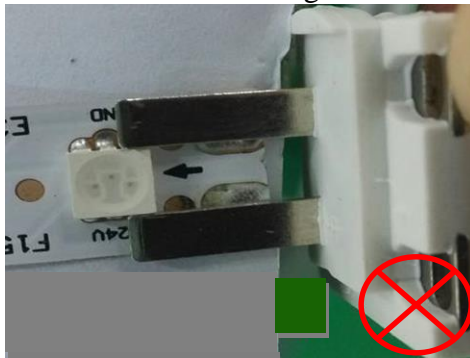
   b. This can cause the first segment to remain dark while the rest of the LED Neon is
      on.

6. Only use LED Neon Shears for cutting in the field. Do not use scissors or other general
   cutting tools.

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