

## BD Loops Water Tight Splice Kit

**BD Loops** Water Tight Splice Kit is designed to create a water-tight seal over a spliced connection. Used in the field, this kit effectively repairs damaged lead-in wire or allows more wire to be connected to the lead-in. Without the protection against the elements that a water tight splice kit offers, spliced loops often short to ground.

The Splice Kit is packed with multiple lengths of double walled adhesive shrink tubing, as well as a strip of glue tape that are applied as layers to create a water-tight seal. Making an effective and durable splice in the field has never been easier.

The Splice Kit is designed to prevent common problems associated with splicing in the field, such as corrosion, oxidization, and contact with water. The double walled adhesive shrink tubing creates a tough waterproof seal that is ideal for direct burial use or to be run through conduit. **The Splice Kit is not to be used with wire thinner than 16 AWG (e.g., 18 or 20AWG).**

A soldering iron as well as a heat gun or blow torch is required to use the Water Tight Splice Kit.

**Warning:** Make sure to read all manuals of tools you are working with such as Soldering Irons, Blow Torches, and Heat Guns. Wear protective equipment such as gloves and protective eyewear. Always wash hands after handling solder and refrain from touching eyes or mouth.

**Disclaimer:** BD Loops makes the Splice Kit available to selected industries to offer a kit with a high chance of success specifically for splicing the lead-in of loops. BD Loops intent is to provide high quality materials and detailed instructions with complete information promoting best practice. However, BD Loops cannot guarantee the quality, content, accuracy, or completeness of the information presented in the Splice Kit. Extenuating circumstances that BD Loops cannot foresee may affect the accuracy of this information. If you feel your splice might require special installation instructions please contact BD Loops at: 714-723-0946.

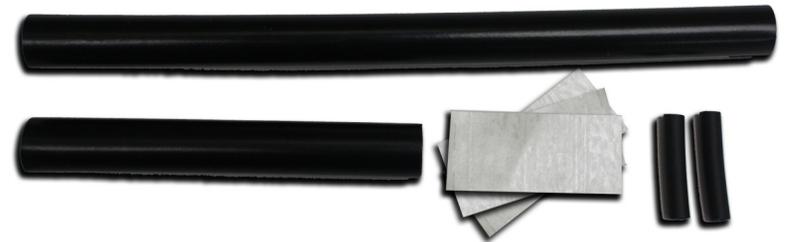
The author may revise this documentation from time to time without notice. The rate of success relies heavily on the workmanship and attention of detail of the installer. This document and kit is provided as is without warranty of any kind. In no event shall BD Loops be liable for indirect, special, incidental, or consequential damages of any kind arising from any error in this documentation, included without limitation any loss or interruption of business, profits, use, or data.

# BD Loops

We're on the Installer's Side

## Water Tight Splice Kit

For Repairing or adding additional length to a loop lead-in



### Kit includes:

- (1) 6", 1/2" Adhesive Lined Shrink Tubing
- (1) 4", 1/2" Adhesive Lined Shrink Tubing
- (2) 3/16" Adhesive Lined Shrink Tubing
- (3) Pieces of Glue Tape

### What You Need:

- Soldering Iron
- Solder
- Pliers
- Heat Gun or Blow Torch (Heat Guns are preferred, as they are less likely to over heat the wire and shrink tubing.)
- BD Loops Lead-in wire or wire that is 16 AWG or thicker.



### Step 1:

#### For splicing a wire with an independent outer jacket:

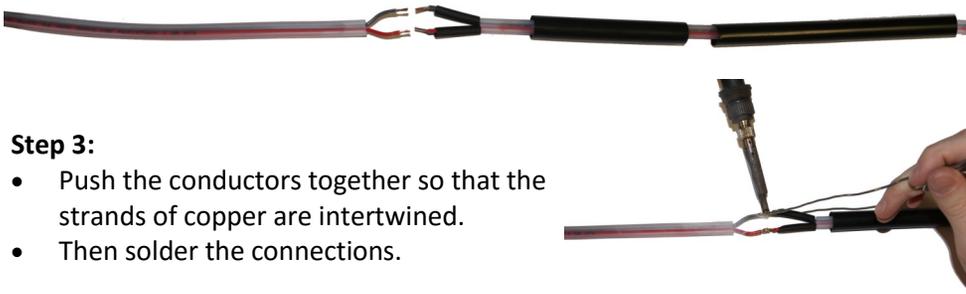
- Strip the outer jacket 2" on one half of the splice, and 1" on the other half.
- Strip each conductor 1/2".

#### For wire without an independent outer jacket:

- Strip the conductors back 1/2".

### Step 2:

Before soldering positioning the 1/2" diameter shrink tubing on one side of the wire being spliced. Put the 8" piece of shrink tubing first followed by the 4" piece of shrink tubing. Position the two 3/16" Shrink Tubing on the side stripped 2" on each conductor. (See image below)



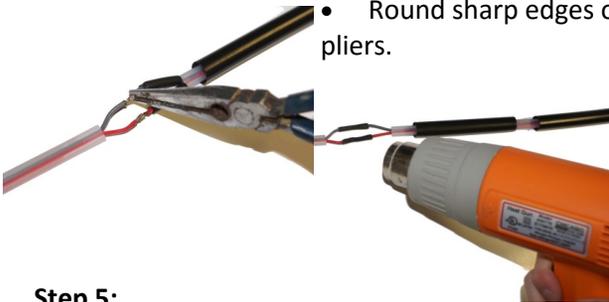
### Step 3:

- Push the conductors together so that the strands of copper are intertwined.
- Then solder the connections.

**Warning:** Do not hold the soldering iron on the connection for too long and shrink the 3/16" diameter pieces of shrink tubing.

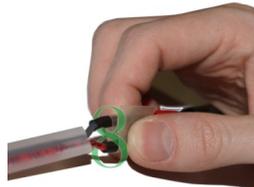
### Step 4:

- Round sharp edges of the soldered connection with pliers.
- Then position the 3/16" pieces of Shrink Tubing over the soldered connections and shrink them using a Heat Gun or Blow Torch\*.



### Step 5:

Wrap the Glue Tape in-between the connections in a figure 8 (See picture on right).



Then position the 4" piece of Shrink Tubing centered over the wrapped connections completely covering the stripped section. Use the Heat Gun or Blowtorch to shrink the tubing\*.

### Step 6:

Gently squeeze both edges of the shrink tubing with a pair of pliers to be sure a water tight seal is created.



### Step 7:

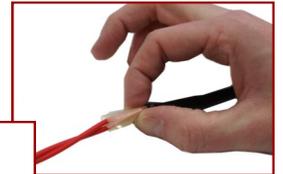
#### For wire with an independent outer jacket:

Position the 8" piece of Shrink Tubing centered over the 4" piece of Shrink Tubing and shrink it using the Heat Gun or Blowtorch\*.



#### For wire without an independent outer jacket:

- Wrap the Glue tape in between the wires on each side of the 4" Shrink Tubing in a figure 8.



- Position the 8" piece of Shrink Tubing centered over the 4" piece of Shrink Tubing and glue tapes. Then shrink the 8" piece of Shrink Tubing using a Heat Gun or Blowtorch\*.

### Step 8:

#### For wire with an independent outer jacket:

Gently squeeze both edges of the shrink tubing with a pair of pliers to be sure a water tight seal is created.



#### For wire without an independent outer jacket:

Position the pliers between the conductors and gently press to create a water tight seal. (see picture on right)



**This Splice Kit is not designed for wire thinner than 16 AWG.**

**\*Warning:** Do not overheat the shrink tubing which could cause it to split. Move the heat source back and forth to spread out the heat.

