



Assembly Instructions

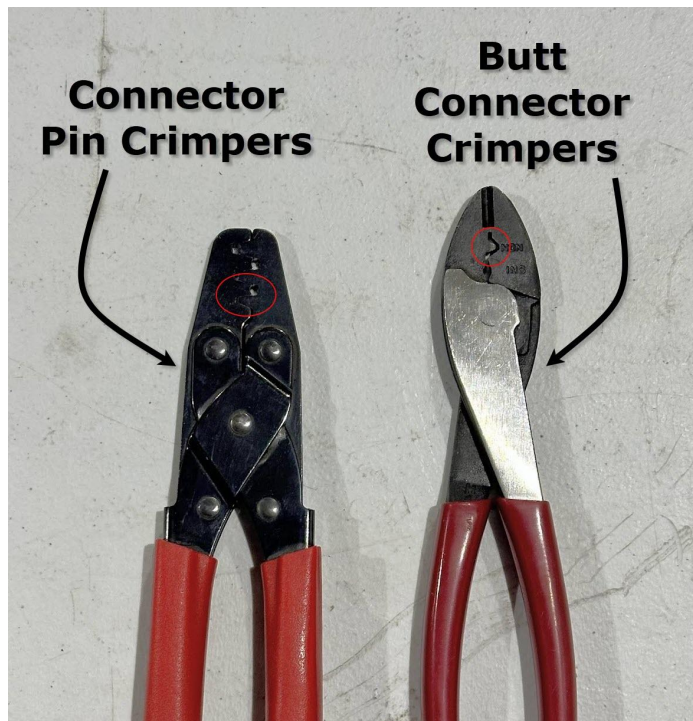
JL TAG LIGHT EXTENSION HARNESS - (JL-1654)

****Please read these instructions thoroughly before starting this project. Collect all tools/components before beginning this process.****

Tools Required:

- Tape Measure
- Wire Cutters
- Wire Strippers
- Wire Crimpers - Terminal Pins
- Heat Gun/Torch
- Scissors
- Pocket Screwdriver or Pick

****Below is an image showing the difference in crimpers used for this assembly. Circled are the parts of the crimpers that will be used for each instance.****



Tag Light Extension (JL-1654) - Qty: 1

Components Needed:

***These are the bulk components you'll need, their quantities will be specified in the assembly steps. ***

- 18ga Bonded Red/Black Wire (CMP-1007)
- 1/4" Wire Loom (CMP-1049)
- 3/8" Heat Shrink (CMP-1050)
- Female Connectors (CMP-1009)
- Male Pins (CMP-1010)

1) Cut Bonded Wire, Wire Loom, and Heat Shrink to length, and pull quantities of components as noted below.

****If making multiples, go ahead and cut/pull the appropriate number of components****

- Bonded Wire: **102" x1**
- Heat Shrink: **2" x2**
- Male Pins: **4**
- Wire Loom: **100" x1**
- Female Connectors: **2**

- 2) Feed bonded wire through wire loom leaving about 1" exposed on either end.
- 3) Separate the Red and Black wires about 1" back on each end.
- 4) Strip insulation from Red and Black wires about 3/16" back on both ends.
- 5) After twisting exposed wires, crimp (4) Male Pins on each one. *Make sure pins are all oriented the same way so you don't have to twist the wire to install them into the connector. Note before/after crimping in Diagrams 1&2.*

Diagram 1

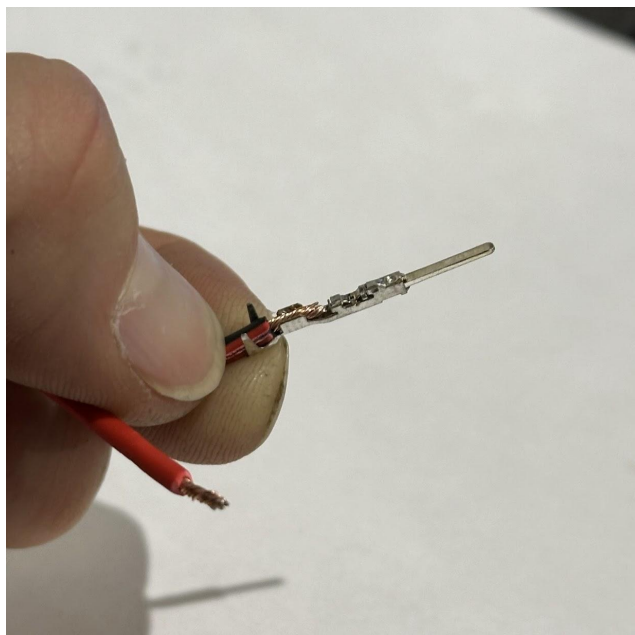
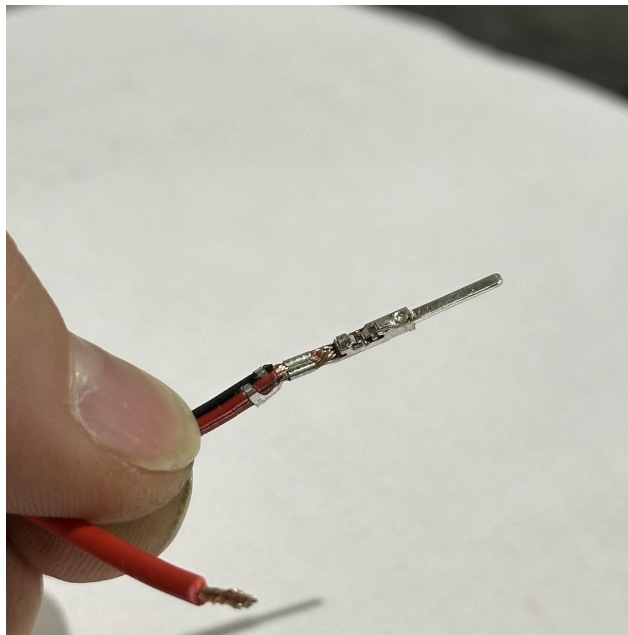
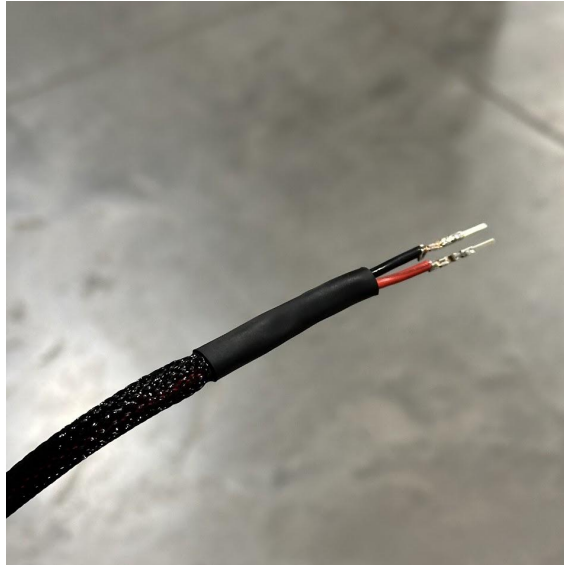


Diagram 2



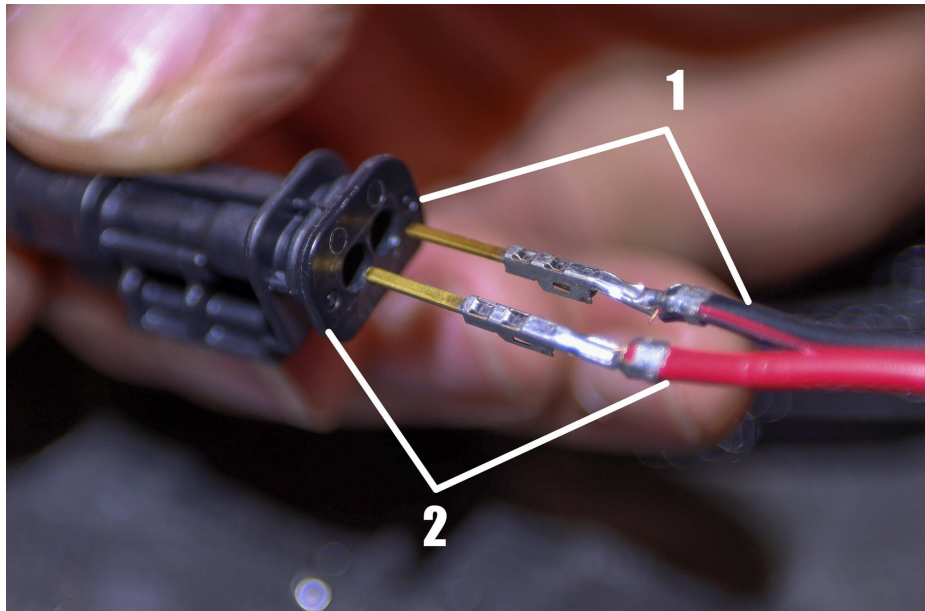
- 6) After crimping, slide a 2" piece of $\frac{3}{8}$ " heat shrink on each end. Locate heat shrink halfway over (1") the end of the wire loom and shrink using a heat gun or torch. *If the loom is frayed on the ends, make sure to get all of the strands into the heat shrink. PAY CLOSE ATTENTION WHEN SHRINKING HEAT SHRINK, MAKING SURE NOT TO MELT THE LOOM!* See Diagram 3 for how it should look when finished.

Diagram 3



- 7) Install (1) Female Connector on one end of the harness. The Black wire will go into position 1 and the Red wire will go into position 2. See Diagram 4. *Note connector/pin orientation if you can't read the numbers on the end of the connector. Listen for an audible "click" from each wire to ensure they're fully seated. Perform a "tug test" to ensure pins are actually seated.*

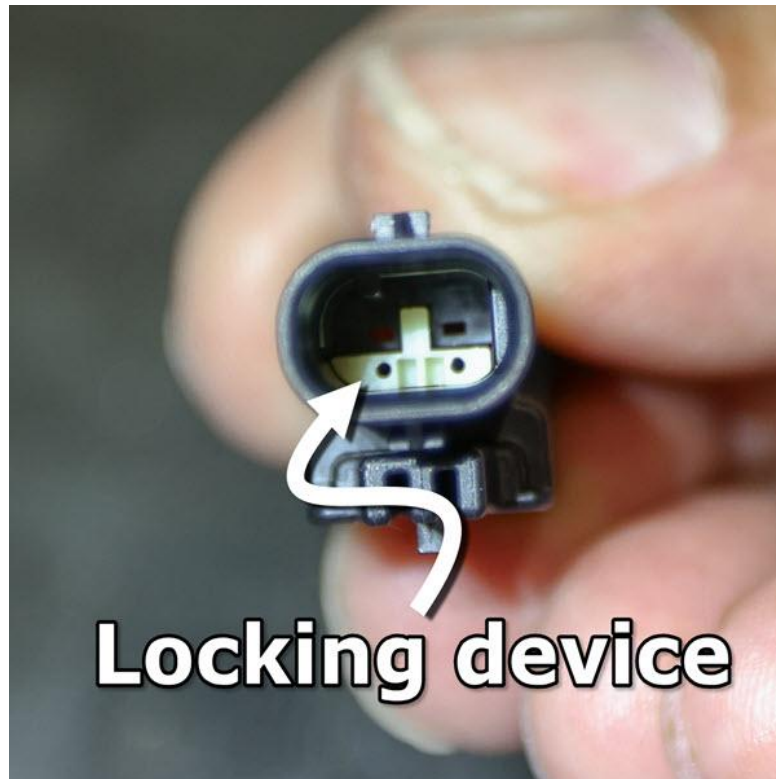
Diagram 4



- 8) After installing the connector, and the pins are fully seated, using a pocket screwdriver or pick, engage the pin lock. From the opposite end of the connector, push in the white pin lock until seated. See Diagram 5.



Diagram 5



- 9) This completes the harness. Put the second Female Connector in a ziplock bag, coil the harness and zip tie them together as shown in Diagram 6. Cut tag end flush on zip tie.

Diagram 6

