



Assembly Instructions

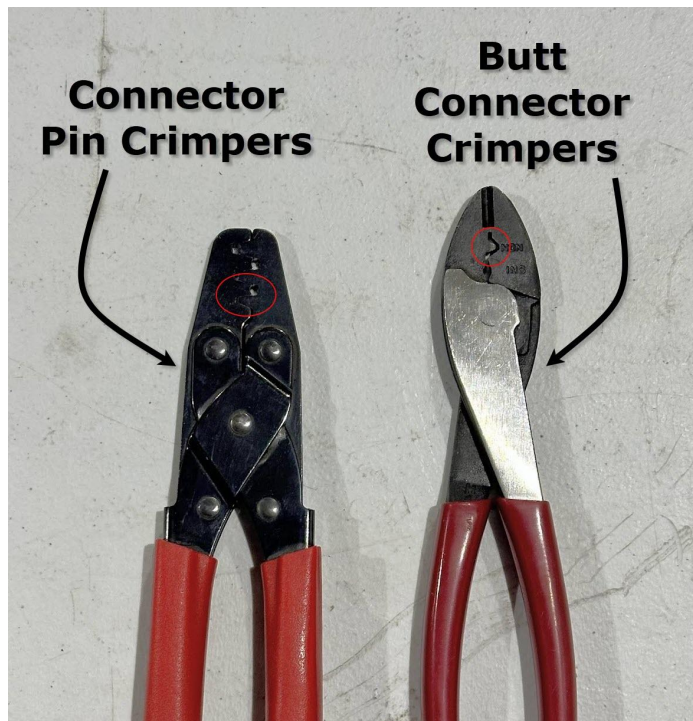
JL 3RD BRAKE LIGHT HARNESS - DOUBLE (JL-1650)

****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 - Connector Pins
- Wire Crimpers - Butt Connectors
- 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.****



3rd Brake Light Harness - Double (JL-1650) - Qty: 1

**** This harness is for use with the JL License Plate Relocation Bracket.****

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)
- Brake Lights (CMP-1005)
- Butt Connectors 18-22ga (CMP-1006)
- 3/16" Heat Shrink
- Male Connectors (CMP-1009)
- Male Pins (CMP-1010)

1) Cut Bonded Wire, 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****

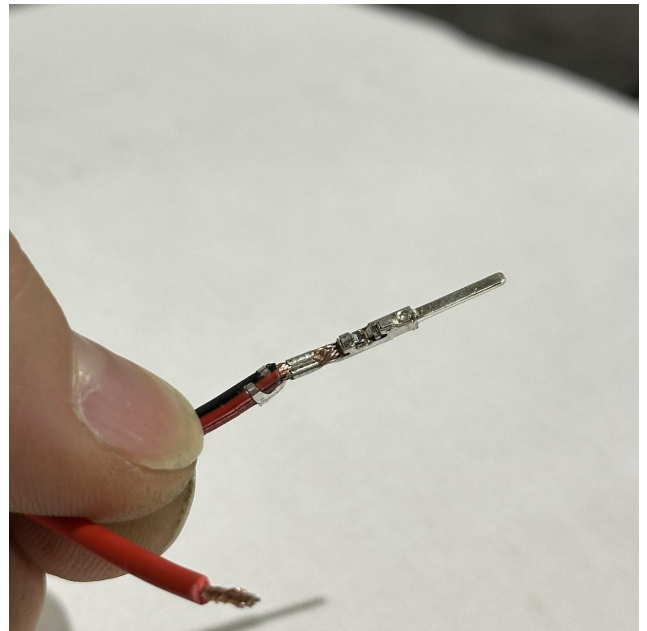
- Bonded Wire: **4.5" x1**
- Heat Shrink: **1" x2**
- Butt Connectors: **2**
- Brake Lights: **2**
- Male Connector: **1**
- Male Pins: **2**

- 2) On bonded wire, separate the Red and Black wires about 3/4" back on each end.
- 3) Strip insulation from Red and Black wires about 3/16" back on both ends.
- 4) After twisting exposed wires, on one end, crimp a Male Pin on each wire using Pin Crimpers. *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

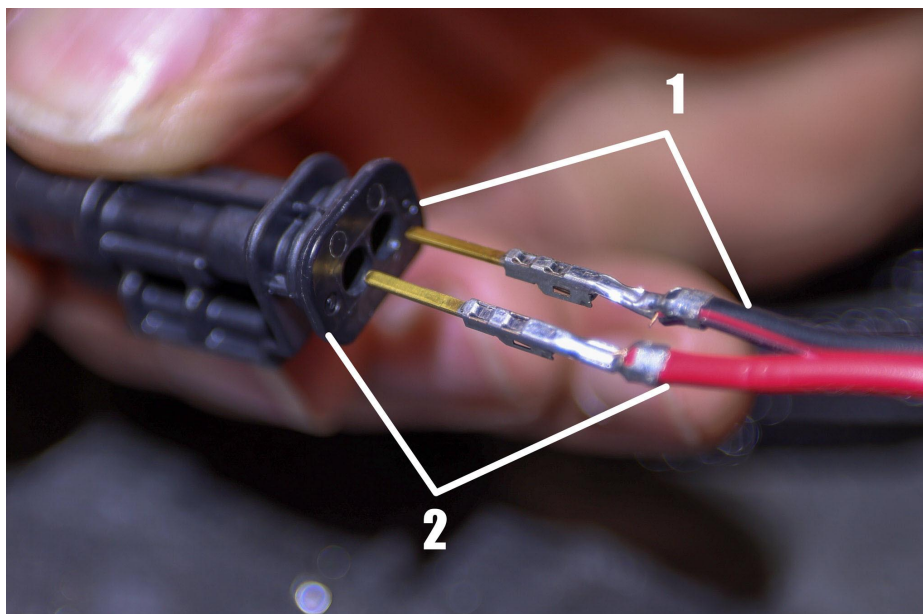


Diagram 2



- 5) Install (1) Female Connector on the end of the harness with the Male Pins. The Black wire will go into position 1 and the Red wire will go into position 2. See Diagram 3. *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 3



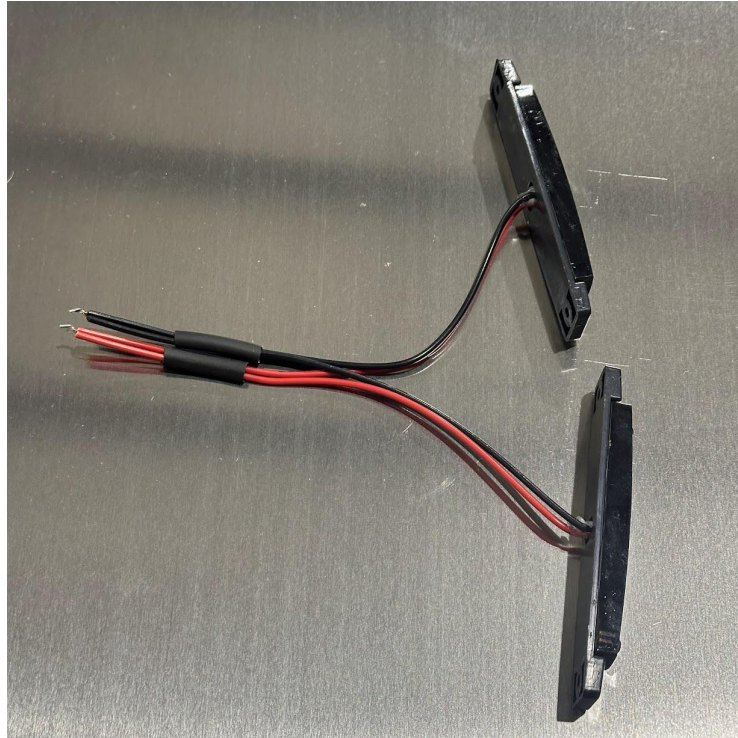
- 6) After installing the connector, and the pins are fully seated, using a pocket screwdriver or pick, engage the pin lock. From the opposite end of the connector, push in the white pin lock until seated. See Diagram 4.

Diagram 4



- 7) On the other end, crimp an uninsulated butt connector on the Red and Black wires. Set harness aside until step 11.
- 8) Brake Light Prep: Ensure the pigtails on the LED brake lights are around 6.5" and strip back both wires on each ¼".
- 9) Twist the two Black wires and the two Red wires together, joining the lights.
- 10) Slide a 1" piece of heat shrink tubing over both Red and Black joined wires. See *Diagram 5*.

Diagram 5



- 11) Crimp the two Black wires into the open end of the uninsulated butt connector on the black wire from the connector pigtail you completed in step 7. Repeat the process for the Red wires.
- 12) Slide the heat shrink down to evenly cover each butt connector and shrink with a heat gun or torch. *Be careful not to burn the wire insulation!*
- 13) Coil the pigtail as shown in Diagram 6, and you're done!

Diagram 6

